

October 1944

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SUMERS' RESEARCH

Bulletin



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CONSUMERS' RESEARCH

Vol. 14 • No. 4

BULLETIN

October 1944

Off the Editor's Chest

IN peacetime, the bulk of the consumption of goods is by consumers. In wartime, civilian consumers' needs and requirements necessarily take second place to those of the armed services and the vital supporting agencies of construction, transportation and communication. Thus the consumer gets what is left over after the voracious demands of the military for war material have been satisfied.

Gone are the days when "the customer was always right" and an almost infinite number of brands and commodities vied for his notice and acceptance. He takes what he can get and likes it, or does without. Most people realize that this is the inevitable result of war on a colossal scale and have made surprisingly good adjustments to the situation. On the whole there have been few complaints over the lack of new automobiles, refrigerators, washing machines, fountain pens, typewriters, cameras, and the major items of convenience and recreation on which the American consumer was wont to spend his money. Indeed, one government war agency in making a survey to discover what people wanted to have produced first when the manufacture of appliances for consumers could be resumed was surprised to find how little urgency was felt regarding new major appliances. It was reported that elastic tape, women's hosiery, shoes, and bobbie pins led the items that were most missed. In another survey of public opinion, it appeared that automobile tires and tubes and silk or nylon stockings topped the list of things the public would most like to buy, aside from food.

Had the questionnaires been phrased to bring out what was the consumer's major dissatisfaction

with wartime living, they might have disclosed something that could be remedied without extensive retooling of any factory, or the use of scarce materials or even re-allocation of manpower—something that merely required a change of attitude on the part of those who in normal times are looked upon as servants of the public and who at all times ought to consider themselves in that position.

Everyone who has had to buy groceries, order a meal in a restaurant, buy children's shoes in a big-city department store, or a pair of socks of a desired make, or tried to get laundry or dry cleaning done in a specified length of time has too often been treated as if his request or his wish for reasonable service were utterly unreasonable. The stock phrase has been "Don't you know there is a war on?" Many writers have complained in the public prints about the situation. Emily Post pointed out that never before so far as she could remember had "there been anything like the epidemic of rudeness that seemed to be spreading among those hitherto most courteous of persons: managers, sales clerks, even proprietors." H. I. Phillips (*N.Y. Sun*) was moved to parody a familiar childhood poem:

"I remember, I remember,
When salesgirls thought it fair
If they looked up at times and found
A customer was there!
When they knew that they drew their pay
To wait on people who
Came in to spend a dollar and,
If waited on, spend two!"

(Continued on page 22)

Scientific and Technical Experts and Editors: F. J. Schlink, R. Joyce, M. C. Phillips, A. R. Greenleaf, and Charles L. Bernier. Editorial Assistant: Mary F. Roberts.

Symbols used to indicate sources of data and bases of ratings: A—recommended on basis of quality; AA—regarded as worthy of highest recommendation; B—intermediate with respect to quality; C—not recommended on basis of quality; cr—information from Consumers' Research's own tests or investigations; 1, 2, 3—relative prices, 1 being low, 3 high. Note that price and quality are completely differentiated in CR's listings; a quality judgment is independent of price; 43, 44—year in which test was made or information obtained or organized by the staff of Consumers' Research.

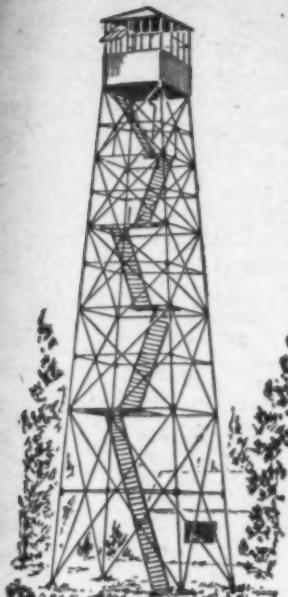
It will be advantageous if you will, whenever possible, send prompt notice of change of address at least a month before it is to take effect, accompanying your notice with statement of your old address with name in full. At least three weeks' notice must be given in any case. This rule, however, regarding long advance notice does not apply to military personnel. Changes of address for men and women in the services will gladly be handled whenever required.

★ ★ ★ For a brief cumulative index of 1944 BULLETINS preceding this issue, see page 26.
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The Consumers' Observation Post



RANGE-FED BEEF is now coming to market because it is not profitable under OPA ceiling prices for the cattlemen to fatten and finish their herds on grain. (The "finishing" process on grain feed is what is depended on, as a rule, to produce tender beef.) It looks as though it will be necessary for those who like their steaks and roast beef rare to cultivate a taste for pot roast, stew, and Swiss steak. Tough meat needs to be cooked for a long time, by slow moist heat to make it tender and juicy. It is best browned in fat and then cooked over slow heat for several hours, in a tightly covered pan with a little added liquid, water or broth.

HIGH-OCTANE GASOLINE is going overseas for use in airplanes, tanks, and army trucks. That which is being distributed at this time for civilian use is admittedly of low grade. The pinging of an automobile engine when going up a slight grade is due to the low anti-knock quality of the gasoline, which will not improve until it is no longer needed in such vast quantities for the engines of war. This pinging, however, does no harm as long as it is not too pronounced or loud; in fact a little pinging when the engine is pulling hard, under load, is desirable for it indicates that the ignition is set correctly to give good gasoline economy and prevent carbon formation.

PEAS were once a tasty vegetable, but the undercooked, hard, tasteless product that is now listed as "green peas" on restaurant menus is fit only for the garbage can. The peas may be of the varieties that were developed for durability (good shipping and keeping qualities) rather than palatability, or have not been cooked long enough. One researcher suggests that precooking the peas before they are frozen might improve them.

RAYON FABRICS will need considerable improvement in several aspects if they are to hold their own in the post-war market, according to a leading trade journal. Women are a bit tired of fabrics that have to be pampered and that require special handling. Rayon will need to be completely washable in order to compete with nylon and vinyl resin fabrics. The susceptibility of acetate rayon to dye-fading by fumes or gas is also a drawback to be overcome. It is important, for example, not to store such rayons near paper or next to felt or wool if they are to keep their color. Some think that under certain circumstances exposure to fumes of moth control chemicals such as paradichlorobenzene may increase the tendency to gas-fading.

HARMFUL EFFECTS OF VITAMINS when taken in excessive amounts have been noted from time to time in CR's Bulletin. It is generally accepted that an excess of vitamin D may be dangerous. A report comes to hand of fairly extensive experiments on dogs indicating that over-dosages of vitamin D retarded jaw and tooth development, caused malformation and malocclusion (poor relationship of abutting surfaces of upper and lower teeth), as well as other abnormal conditions, and had a detrimental effect on the connective tissues. Heavy doses of vitamin A were found to counteract the effect of the vitamin D, but did not eliminate it. The naturally-produced vitamins as found in fish oils were less toxic than the vitamin products formed by irradiation with ultra-violet light. The investigator's conclusion was that extreme care should be taken in recommending use of vitamin D by patients with dental ailments.

MECHANICAL REFRIGERATORS will begin to reach dealers' showrooms by June 1945, predicts one trade journal. It is expected that, because of their importance in maintaining health, refrigerators will be among the first major appliances on which production will be resumed. By the end of 1945, this same forecaster believes, there will be enough of all consumer "durables" to satisfy demands except for automobiles and radio sets.

* * *

TIRES that have been recapped or otherwise repaired should not be stored in damp places, nor left unprotected from the weather. Any tire that has been cut, punctured, or abraded will have points at which water can enter, whence it can travel by capillary attraction along the cords or fabric. This moisture results in ply separation later when new rubber is applied in recapping or repairing. Molds that may form will, of course, greatly weaken or even rot the fabric. An old tire that may possibly be recapped or repaired should be given the same care as a new tire and should be stored in a dark, cool place free from contact with oil, gasoline, grease, moisture, and, so far as is practicable, away from rapid movement of air, since air in motion hastens the deterioration of rubber goods.

* * *

WASHABLE RAYON DRESSES that have lost their crispness and are inclined to droop may be revived by a gelatin rinse, according to government advice. Directions call for soaking two tablespoonsfuls of gelatin in a little cold water and then dissolving it with boiling water. Put the solution into a vessel large enough to hold the dress and add enough cold water to make lukewarm. After the dress has been washed and rinsed, dip it in the gelatin solution, squeeze gently, and wrap in a heavy towel until dry enough to iron. N.B. When the humidity is high, this process may not be effective.

* * *

THE PHOTOGRAPHIC TRADE doesn't like price cutters, according to a trade journal in the field, which comments with pleasure on the fact that the wartime scarcity of merchandise has gotten most dealers into the habit of selling at full list prices. The journal expresses the hope that since consumers will have several years' experience in buying merchandise at full price before post-war production really reaches its peak, they will be accustomed to the new price levels which, the article urges, should be maintained. "Cut-rate dealers," points out the magazine, "will be amazed to learn how much less merchandise they will have to sell in order to make as much profit as when selling at 20% off." Fortunately for consumers there will probably be so many ex-service men and war workers and consumer-minded merchants who want to go into business for themselves that competition will be keen in spite of any and all attempts to put the trade on a "stabilized," fixed price basis.

* * *

NEW AUTOMOBILES, when production is permitted to be resumed, will be based on 1942 models with some minor changes such as new grilles, moldings, upholstery, and gadgets, declares a trade expert. Practically the only change in the engine will be the substitution of aluminum for the cast-iron pistons that were required on late 1942 models because of the need for aluminum for war materials. Depending to some extent on what Henry Ford does about his projected new car, prices are expected to be 25 to 40 percent higher than those of pre-war days. Resumption of production is predicted for around April 1945.

* * *

SALES OF FROZEN VEGETABLES are meeting with success in certain varieties, but so far there has been no acceptable method devised for freezing tomatoes. When thawed, frozen tomatoes collapse, their texture breaks down, and after cooking they tend to have a sharp, strong flavor. When fresh tomatoes are not available, canned tomatoes are still to be preferred to the frozen product.

* * *

ELECTRICAL APPLIANCES should not be used in or near the bathtub. They are frequently the cause of fatal accidents. In one particular case, a radio had been placed beside the tub so that the person taking a bath would not miss a favorite program. In some fashion the radio fell into the tub, providing a direct connection between the water and the power lines so that the bather received a fatal shock. In the interests of safety, it will be wise to keep all such appliances out of the bathroom entirely so that there is no possibility that contact can be made with a person who has wet hands or feet, or who is in the tub.

(The continuation of this section is on page 29)

IT is something of an event these days to buy a pair of children's shoes in the correct size, and still more difficult to find the right size in the desired brand. In making the purchases for CR's test, it often took as long as an hour to get waited on; yet the request was simply for "a brown oxford in size 13C" of a specific brand that particular store was known to carry. Probably another half to three-quarters of an hour would have been required under wartime store conditions to try several pairs of shoes on a child for correct fit.

Characteristics of a Well Designed Shoe

It cannot be too strongly emphasized that proper fit of a shoe of the correct shape is one of the most important factors in purchasing children's shoes. Feet that have been deformed by an ill-fitting, poorly-designed shoe in childhood may be the cause of foot troubles and even serious ill-health in later life. Here are the characteristics of a well-designed shoe:

— The heel should be low and broad.

— The inside edge of the shoe should deviate only slightly from a straight line when the heel and inside edge are laid against a ruler.

— The heel should fit snugly so that it does not slip up and down, but the shoe should fit loosely from the ball of the foot to the toe.

— The toe of the shoe should be wide and roomy, so that the toes are not pinched either by being squeezed sideways or by pressure from above by a toe cap that is not high enough.

— Soles and uppers should be flexible, but the sole should be firm enough and thick enough for proper protection and support.

— There should be an allowance of at least one-half inch in length beyond the toe.

Importance of Good Shoe Care

In view of the need for making shoes last as long as possible, it is advisable to teach children to care for their shoes by cleaning and polishing them at frequent intervals. Dirt left on shoes hastens deterioration of the leather. A good shine gives considerable protection from dirt and dampness, thereby helping to retain the oils in the leather and keeping it pliable and soft.

The items needed are inexpensive and easily secured. They consist of two daubers, a good polishing brush, a bottle of cleaner, and a box or tin of wax polish. Brush off loose dirt from shoes. Then apply the cleaner first to remove dirt and old polish, rubbing it well into the leather. (*Griffin Black Liquid Sterling Dressing* is a satisfactory cleaner for black

shoes.) Wipe off excess cleaner and allow surface to dry. Then apply the wax with a dauber, working it well into the crevice between the sole and the upper. Next polish the shoe with a brush and finish with a wool-fleece buffer or wool polishing cloth. The recent fashion of wearing dirty unshined shoes is particularly undesirable in these times when leather is scarce, for it definitely means reduced wear-life for shoes.

CR's Tests

The 14 brands of shoes in the present test were selected because they were extensively advertised or, in most cases, because they had wide distribution. *Indian Walk*, which received a *B. Intermediate* rating in the last test (reported in Consumers' Research BULLETIN, August 1943), was omitted because it is distributed only in New York City and vicinity. Because of the importance of proper fit, which one of our consultants believes is difficult, if not impossible, to secure by mail, no brands were purchased for test from the mail-order houses.

The shoes have been rated on design, by a competent or-

thopedist, and have been subjected to standard tests for the quality of soles and uppers. The brown oxfords selected were such as may be worn by either boys or girls. The *Classmates* brand, however, came in a style for girls that was somewhat lighter in weight than the boys' model. Both of these were purchased for comparison.

As in the previous test, quality of materials and workmanship of all brands remain below that of pre-war days. The objectionable feature of the black synthetic soles and heels which have a tendency to mark wood floors, stairs, and linoleum very badly may be eliminated in the months ahead. It has been predicted by one of the shoe journals that by the end of the year more *Buna S* synthetic rubber should be available for rubber soles so that soles and heels in other colors than black may be made, thereby solving the problem to some extent.

All ratings are cr44.

B. Intermediate

Buster Brown, F351 (Brown Shoe Co., St. Louis) \$5.25. Brown oxford with reinforced toe cap. Overall rating from findings of orthopedic examination, good. Sole of black composition, which marked floors only faintly. Quality of sole as measured by thickness and abrasion resistance, excellent, best of the synthetics. Uppers, chrome calf of very good quality. Mid-sole, ground cork with tar-like binder. Shank, wood. Black composition heel marked floors badly.

Classmates for Girls, 2363 (Ideal Shoe Mfg. Co., Milwaukee) \$3.45. Brown pebbled leather oxford. Overall orthopedic rating, good. Quality of sole (waxed chrome) as measured by thickness and abrasion resistance, fair. Uppers, chrome retan. Mid-sole, ground cork with gummy binder. Shank, metal. Black composition heel marked floors badly.

Classmates for Boys, 2273 (Ideal Shoe Mfg. Co.) \$3.45. Brown oxford with reinforced toe cap. Overall ortho-

pedic rating, good. Quality of sole (waxed chrome) as measured by thickness and abrasion resistance, fair. Uppers, vegetable tan split. Toe cap, vegetable tan, probably sharkskin. Mid-sole, ground cork with gummy binder. Shank, metal and paper. Black composition heel marked floors badly.

Coward, 67102 (Coward Shoe, Inc., 270 Greenwich St., New York 7, New York) \$6.95. Brown oxford with reinforced toe cap. Overall orthopedic rating, good. Quality of sole (waxed chrome) as measured by thickness and abrasion resistance, fair. Uppers, chrome side (calf). Toe cap, vegetable tan, probably sharkskin. Mid-sole, ground cork with gummy binder. Shank, metal. Leather heel.

Kalisteniks, 6115 (The Gilbert Shoe Co., Thiensville, Wis.) \$5.25. Brown oxford with reinforced toe cap. Overall orthopedic rating, good. Quality of sole (unwaxed chrome top grain) as measured by thickness and abrasion resistance, good. Uppers, chrome retan. Mid-sole, ground cork with gummy binder. No shank. Black composition heel marked floors badly.

Vitality, J2481 (International Shoe Co., St. Louis) \$4.75. Brown oxford with holes punched through leather on top of toe and uppers. Overall orthopedic rating, good. Quality of sole (waxed chrome) as measured by thickness and abrasion resistance, good. Uppers, chrome retan. Mid-sole, ground cork with gummy binder. Shank, metal. Leather heel.

* * *

The following brands were given a lower rating on design and shape in the orthopedic examination than those already rated. The wearing quality of their soles, however, was on a par with the brands immediately preceding the asterisks, hence they may be considered as meritizing a low *B* rating.

Dr. Posner's Scientific Shoes, 7692 (Dr. A. Posner Shoes, Inc., 137 Duane St., New York 13, New York) \$4.95. Brown oxford with reinforced toe cap. Overall orthopedic rating, fair. Quality of sole (vegetable tanned cowhide top grain) as measured by thickness and abrasion resistance, fair. Uppers, chrome retan. Toe cap, vegetable tanned calf. Mid-sole, ground cork with gummy binder. Shank, metal and heavy treated

paper. Black composition heel marked floors somewhat.

Health Spot, SM5 (The Musebeck Shoe Co., Danville, Ill.) \$6.75. Brown oxford with leather toe cap. Had scaphoid pad (undesirable unless prescribed by an orthopedic physician). Overall orthopedic rating, fair. Quality of sole (waxed vegetable tanned top grain) as measured by thickness and abrasion resistance, fair. Uppers, chrome retan. Toe cap, vegetable tan split. Mid-sole, ground cork with black tar-like binder. Shank, metal. Leather heel.

Simplex Flex-Eze, 1032 (Simplex Shoe Mfg. Co., Milwaukee) \$5. Brown oxford. Overall orthopedic rating, fair. Quality of sole (waxed chrome) as measured by thickness and abrasion resistance, fair. Uppers, chrome side (calfskin). Mid-sole, ground cork with gummy binder. Shank, metal. Leather heel.

C. Not Recommended

Bass Moccasins, 68 173 (G. H. Bass & Co., Wilton, Maine) \$5.17. Brown moccasin oxford. Overall orthopedic rating, fair. Sole of black composition, which was among the two worst in marking floors. Quality of sole as measured by thickness and abrasion resistance, poor. Uppers, chrome calf of good quality. Mid-sole, leather, full length of shoe. No shank. Black composition heel marked floors badly.

Educator, 3463 (Educator Shoe Corp. of America, 2 Park Ave., New York 16, New York) \$2.49. Brown oxford with modified moccasin toe. Overall orthopedic rating, fair. Sole of black composition, which marked floors somewhat. Quality of sole as measured by thickness and abrasion resistance, poor. Uppers, chrome retan. Mid-sole, ground cork with gummy binder. Shank, wood. Black composition heel marked floors badly.

Lazy Bones, 573 (The Juvenile Shoe Corp. of America, 712 N. 12 Blvd., St. Louis 1) \$4.45. Brown oxfords with design simulating a reinforced toe cap. Overall orthopedic rating, fair. Sole of black composition labeled "Avon," which was one of the two worst in marking floors. Quality of sole as measured by thickness and abrasion resistance, fair. Uppers, chrome side leather. Mid-sole, ground cork with gummy binder. Shank, heavy paper. Black com-

position heel marked floors badly. *Pedi-Poise*, 4682 (J. Edwards & Co., Philadelphia) \$5.25. Brown oxford. Overall orthopedic rating, good. Quality of sole (vegetable tanned cowhide top grain) as measured by thickness and abrasion resistance, poor. Uppers, chrome side.

Mid-sole, ground cork with gummy binder. Shank, metal. Black composition heel marked floors badly. *Poll-Parrot*, 8162 (Roberts, Johnson & Rand, Div. International Shoe Co., St. Louis 3) \$4. Brown oxford with modified moccasin toe similar to that of *Educator*. Overall

orthopedic rating, fair. Quality of sole (black composition labeled "Airflex Bearfoot") as measured by thickness and abrasion resistance, poor. Uppers, chrome side (calfskin). Mid-sole, leather, full length. Shank, wood. Black composition heel marked floors badly.

You Don't Need ----- * ----- * an Exposure Meter ----- *

DESPITE the current wails of anguish from amateur photographers, neither the practice nor the progress of amateur photography need be impeded in the slightest by the non-availability of exposure meters. Exposure meters of one sort or another have been known for some years, but their almost universal use appears to date back only ten years or so, when the first *photo-voltaic cell meters* became popular.

These are devices in which light energy is converted directly into electrical energy, whose value is read on a small meter (a microammeter, in this case). These self-indicating instruments had a magical appeal to the many consumers who like meter readings, and to the gadget collectors, and the mounting propaganda for them in popular journals resulted in hundreds of thousands of amateur and other photographers coming to the conclusion that photography could not be carried on successfully without one. Those who could not afford the high-priced photo-voltaic cell meter bought meters of the older and simpler

extinction type, both from among those brands already on the market and from newer brands which were brought out to take advantage of the sudden boom in exposure meter sales.

The average amateur forgot that up to that time millions of photographs had been made with great success, upon the basis of ordinary judgment and experience or simple exposure tables, instead of using an electrical-optical gadget. Thousands of articles and stories in the photographic press made the use of a meter seem to be the only "scientific" procedure which could assure one of "precision" exposures. It was natural enough for the public to be misled, for few persons, even among those with a good deal of technical training, fully realize that the net result of a computation involving several factors can be no more precise than that factor which is least precisely measurable, regardless of how precisely one or all of the other factors may be measured. The effectiveness of an exposure upon a sensitive emulsion is the combined re-

sult of a considerable number of factors, some of which cannot be measured by anybody, even with the refined laboratory facilities, within the time and with the equipment available for the purpose in taking the average picture. If it really were necessary to measure all these factors with the accuracy with which incident light can be measured, photography would not be a popular art at all, but only a refined laboratory procedure. Fortunately the latitude of an emulsion is such that an approximation to correct exposure is all that is required. A theoretically "correct" exposure is one which places every density appearing on the negative on the straight-line portion of the characteristic curve of the emulsion (see Figure 1). While gross underexposure is ruinous to quality, use of a portion of the toe of the curve (slight underexposure) does not result in offensive distortion of relative tone values. Toward the other end of the scale, considerably more exposure than that necessary to make a printable negative does no harm except to make a

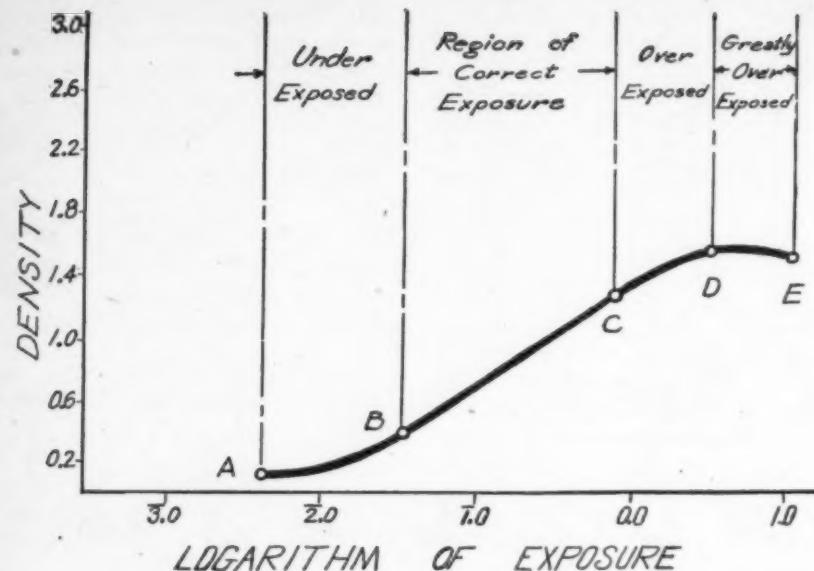


Figure 1—Typical Characteristic Curve of a Film Similar to Verichrome

Many amateur photographers know that each type of film has its own characteristic curve, when density of the negative (defined as the logarithm of opacity) is plotted against the logarithm of exposure. With data plotted in logarithmic units the curve assumes the shape of a straight line over the important section (the region in which uniform increments of exposure produce uniform increments of density). The slope of the straight portion of the curve depends upon the degree to which development is carried. The straight part of the exposure range is the region which includes the theoretically "correct" exposures, but in practice a part of the curve just below B (in dark or shadow parts of a photograph) is often used without producing unpleasant results. Similarly, use of a part of the curve just above C does not necessarily give unpleasant distortion of highlight values.

denser negative, the principal disadvantage of which in a practical sense is that a longer time is required for printing. This increased time may be quite a bother if enlargements are to be made. One well-known pictorialist whose pictures are accepted in the leading photographic salons estimates what exposure he thinks would be "about right" and then gives about eight times that exposure; his negatives are much more dense than those made by the "precision exposure" partisans, but the quality of the resulting prints shows the work of an expert and not of a person who has made himself a slave to meter readings. Another well-known photographer, whose work is widely exhibited, when photographing landscapes, frequently sets his shutter in the

morning for an exposure of around 1/25 sec. at f:8 and shoots pictures all day without changing the speed or aperture settings.

The sensitivity or "speed" of an emulsion can be measured in a number of different ways, and various ratings have been used by manufacturers and still others proposed. These various ratings are very confusing, and time-wasting, and many of them have little or no relation to one another. The recently promulgated standard of the American Standards Association represents a practical compromise accepted by the American photographic industry. The standard appears to make adequate allowances for the variations of emulsion sensitivity, which are unavoidable, as well as for the changes pro-

duced by age, temperature, humidity, etc., under reasonably average conditions.

With emulsion speed defined, and assuming (which is not necessarily true) that the mean brightness of the objects to be photographed is accurately measured by the exposure meter, there remain other factors which can affect exposure.

- 1. **Accuracy of marking of lens stops;** usually satisfactory.

- 2. **Light loss in the lens system.**

- a. Loss in the glass itself is usually negligible.

- b. Loss by reflection at the glass-air surfaces (unless the lens is of the very new coated type available only for military use at this time) amounts to about 10% for a meniscus achromatic lens such as those used in box cameras; about 26% for a Tessar-type lens with six glass-air surfaces; about 34% for an eight-surface lens such as is used on some miniature cameras.

- 3. **Accuracy of shutter speeds.** Shutters of exceptional design and workmanship for special uses can be made to operate within 15% of rated speed, but such accuracy is quite unheard of in any shutters supplied with amateur cameras. Temperature changes cause wide variations; dust working into the shutter usually slows it down over a period of time.

- 4. **Shutter efficiency** is usually unknown to the photographer. It is lowest with large stops and high speeds; highest with small stops and slow speeds. It varies from about 30% for a poor interlens shutter at a large stop and high speed, to about 99% for a good

focal-plane shutter with $1\frac{1}{2}$ in. curtain aperture and lens stopped down to f:64.

5. **"Flare factor"** of the scene; an unpredictable amount of flare light always enters the camera and produces some effect upon the emulsion, thereby affecting the apparent exposure.

6. **Filter factor;** not accurately known unless determined by the photographer for his own conditions and the emulsion in use. (A complicated matter which cannot be discussed here.)

7. **Uneven illumination** over the surface of the film. With a lens of average focal length—about equal to the diagonal of the film—illumination at the corners will be about 65% of that at the center of the film. If a sunshade is used which is too small (optically)—and shades of this type are very common—vignetting will cause an even greater falling off of illumination at the corners. The curtains of most focal-plane shutters accelerate as they move and therefore produce uneven illumination over the surface of the film.

Because the photographer cannot, as a practical matter, correct for all or even most of these variables, it is evident that a mere measurement of object brightness, however accurately it may be accomplished, cannot possibly produce a "precision" exposure. The exposure meter addict is therefore straining at a gnat and swallowing a camel; fortunately for the hobby, neither gnat nor camel is particularly indigestible, and good photographs are turned out in spite of rather than on account of all the trouble taken to arrive

at the "correct exposure."

Examination of a collection of photographs by any of the old-time, pre-electric-exposure-meter expert photographers will disabuse one of the notion that a meter is necessary (for example, the splendid photographs by the late Wm. H. Jackson, made over a period commencing at about the time of the Civil War, and ending with his death in 1942). It will also be noticed that these pictures show a wealth of shadow detail, the result of adequate exposure—several times as long an exposure as would be given by meter indications. Because of the full exposure, these pictures are much more pleasing than the "soot-and-whitewash" results produced by too many photographers of the present time.

CR's advice is to refrain from purchasing an electric exposure meter. The American Emergency Standard Photographic Exposure Computer, published by the American Standards Association (\$1), the Eastman Exposure Kodaguides (10c), or the table shown here give adequate information for the making of satisfactory outdoor exposures.

Direct-color film such as *Kodachrome* has less latitude than monochrome material, but if the instructions packed with the film are carefully followed, satisfactory results will follow. (It is best to make actual tests in order to be able thereafter to allow for the vagaries of the lens and shutter used; one roll of film used in this way is a good investment.) What is considered "correct" exposure for *Kodachrome* is to a great extent a matter of individual taste, since the color balance, as well as density, changes with exposure, and the color balance in any case is not an actual reflection of what is seen in nature by the normal eye. Some like the unsaturated colors produced by overexposure, while others even prefer the blue-purple skies so often seen in *Kodachromes*, and produce them intentionally either by underexposure or use of polarizing screens.

For work with artificial light, the tables supplied by both the film manufacturers and the manufacturers of bulbs will provide a satisfactory guide, for either ordinary film or *Kodachrome* direct-color film.

Practical Outdoor Exposure Table

Light Factors

Bright sun	3
Hazy sun	2
Bright cloudy	1
Dull	0

Scene Factors

Snow, clouds, water, white sand, etc.	4
Landscape with light foreground	3
Average landscapes, etc.	2
Scenes in light shade	1
Objects all in shade	0

Add light factor to scene factor; for 1/25 second exposure time, use stops:

Sum of factors	0	1	2	3	4	5	6	7
Stop	f:2	f:2.8	f:4	f:5.6	f:8	f:11	f:16	f:22

Use this table for medium-speed films: *Verichrome*, *Plenachrome*, *Panatomic X*, *Finopan*, etc. For fast films like *Super XX*, *Superpan Press*, etc., use 2 stops smaller. For 1/50 second, use 1 stop larger than shown; for 1/100 second, use 2 stops larger, etc. Whenever there is doubt, give more rather than less exposure time.



Arms and

Ammunition

THE fantastic demand at present for firearms is probably due to the natural development of a war psychology, but the best advice that can be given is not to buy any type of firearm until after the war unless the need is imperative. For those who must buy now, there are several things to be considered, which are outlined in this brief article. Unless you are well versed in gun lore, obtain the guidance of an expert in this field, for there are many pitfalls for the inexperienced. If an experienced adviser is not available, specific questions (accompanied by a self-addressed stamped envelope) sent to the gun editor of one of the sportsman's magazines will usually bring the inquirer information of value.

A gun, of course, is useless without ammunition; therefore with the present scarcity of supplies, it is important to determine before the purchase of the gun is made that ammunition is available for it, and that you are eligible to purchase it. (Farmers and ranchers are permitted to buy a limited amount of new ammunition for pest control purposes.)

The fact that the size of the bullet is the same as the size of the bore does not necessarily mean that the cartridge is suited to the gun. For example, there are eight different ".32" caliber rifle cartridges, none of which is completely interchangeable with any other; six different ".30" caliber, etc. (One war plant guard was found to

have five different types of loads in his 6-shot revolver.)

Some older rifles are not safe for use with smokeless powder. If the gun has "Smokeless," "Nickel Steel" or "High Pressure Steel" stamped on the barrel, it will be safe with modern loads. In shotguns, Damascus, twist, stub, laminated, or other figured barrels, *are not safe* with modern loads, and should be used only with black powder or the mildest low-velocity smokeless shells.

Old black powder cartridges are often corroded and may misfire, but in small sizes, because of the limited charge, are rarely dangerous when used in proper arms. In the larger sizes, however, a badly corroded or weakened case which bursts at the head or primer pocket may cause serious injury.

Guns fired with the old corrosive primers need special and careful cleaning, first with a good "nitro-powder solvent," such as Hoppe's No. 9, and then with a reliable rust-inhibiting oil or grease such as petrolatum, Cosmoline or, if a proprietary product is preferred, *RIG* is one of several satisfactory products that are available. Canton flannel patches dampened with plain water are excellent for removing primer residue. Their use should be followed immediately by dry patches and the ap-

plication of gun oil or grease.

Rifles

Anyone who *must* buy a rifle now might do best to locate a semi-obsolete caliber such as the .25-35, .38-40, .38-55, .45-70, .44-40, etc. The last three named are excellent for deer up to 100 yards, and the .38-40 a good runner-up, but beyond 100 yards their high (curved) trajectory is a detriment. However, it is worth remembering that only a small percentage of game is ever killed beyond 100 yards. Those who require an automatic rifle for hunting should find the .35 Remington Automatic very satisfactory and preferable to the .25, .30 or .32 calibers in which this rifle has also been made.

Those who need a .22 for shooting vermin, etc., should consider the older models, *Stevens*, *Marlin*, *Page-Lewis*, *Springfield*, *Hopkins and Allen*, and other lesser makes that are still accurate and dependable—providing that they are the heavier models with breech-actions strong enough for modern loads, and are in good order. (Most bolt-action rifles would be safe.) Older models of *Remington* and *Winchester* .22 automatic rifles take special cartridges now difficult to obtain.

As a rule a rough bore .22 will not shoot accurately, or if it does, not for long. Many

gunsmiths, however, are equipped to bore out and re-line .22 rim fire barrels, and when this is properly done, excellent accuracy can be obtained. The charge for such work should be \$5 to \$15 depending on rifle and gunsmith.

Some of the early repeating rifles will not handle the remarkable .22 *Long Rifle* cartridge and it is hoped that the .22 *Long*, which is a poor load, will be discontinued after the war. Rifles, such as the *Colt* pump-action *Lightning*, designed for .22 *Longs*, should be bought only as a last resort and never used with high-speed loads.

Shotguns

The conventional double-barrel ("side by side") type of shotgun is standard and is considered mechanically better and stronger than the "over and under" type. *Winchester*, *Parker*, *Fox*, and *Ithaca* are four satisfactory makes which with proper care will give good service. 12-gauge is standard but 16-gauge and 20-gauge which have a shorter effective range are lighter in weight and less tiring to carry. In the repeating types the *Winchester Model 12* is a very satisfactory gun. A single barrel, single-shot type can fill most needs and is cheaper than a double barreled gun. *Winchester*, *Stevens*, *Savage*, *Harrington & Richardson*, and *Iver Johnson* are all good guns of this type.

Revolvers and Automatic Pistols

The "hand-gun" situation can best be described as chaotic. Poor weapons are high in price and good ones exorbitant. Few people have real need for them. They are specialized weapons and there are few persons who have the skill

to shoot accurately with them. Hand-guns firing loads heavier than .32 or the less powerful of the .38 cartridges are difficult to shoot well and the ammunition is expensive. When it comes to automatic pistols, those of *Remington* make are particularly good. *Luger* and *Mauser* automatic pistols are satisfactory if in good condition, but the country since World War I has been flooded with *Lugers* which can only be considered as junk. While some excellent automatic pistols are made in Spain and Belgium, most of those that have reached this country are of very low quality and should be avoided by anyone who is not a really expert judge of small arms. A good *Smith & Wesson* or *Colt* revolver or *Colt Automatic* is judged to be the best purchase today. The best grades of *Harrington & Richardson* and *Iver Johnson* are also good, especially in .22 target models. High velocity loads should not be used in old-model pistols unless the matter has first been checked with the manufacturer.

Gun Repairs

Repairs and parts replacement are a problem. Factories are glutted with war orders and most of the competent gunsmiths (few at best) are of course in war work. There is no trade where more harm can be done by a poor or careless workman, for a poor gunsmith can ruin a gun or make it unsafe or both. Sometimes an incompetent or inexperienced "expert" can be distinguished by such advertising as: "Locksmith. Keys made, guns repaired, saws filed, lawn mowers sharpened." A skillful amateur who tinkers with guns because he has a feeling for weapons and their mechanism is often a better workman than such a practitioner. On the other hand, unskillful home tinkering can involve serious dangers in use of a gun.

To sum up, if you don't have an actual need for a gun, now is a fine time *not* to buy one; also a good time not to have one repaired if the matter is one that can possibly wait.

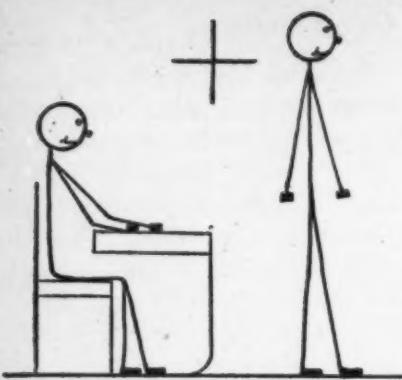
Annual Cumulative Bulletin Now Ready!

THE new 1944-45 *Annual Cumulative Bulletin* is now off the press. It was mailed during the last week of September to all subscribers who had sent in advance orders.

When, after the lapse of a year in the issuance of the *ACB*, we announced in the April 1944 *BULLETIN* that the *Annual Cumulative Bulletin* would again appear, it was our hope that it could be mailed with the regular September *BULLETIN*, the first week in September. Unfortunately, wartime limitations of available help both on our staff and that of our printer made this impossible. The fact that the volume of material to be included grew from the 160 pages originally planned to the present 192 pages was also a factor causing the delay.

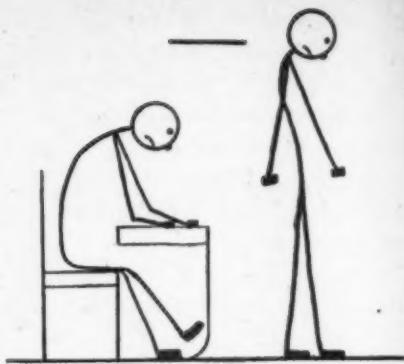
We wish to thank the subscribers who placed their advance orders in such numbers. Their thoughtfulness has been most helpful in helping us estimate the number of copies to have printed—a most important consideration in these days.

Those who wish to order their copy of the new *ACB* will find a convenient blank on page 30 of this *BULLETIN*.



Posture

By M. BECKETT HOWORTH, M.D.,
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POSTURE has long been thought of as the way one stands or sits, and correct posture as the erect position assumed when one is under inspection, but it should really be considered as the sum total of the positions and movements of the body. It should include not only the fundamental static postures in lying, sitting, and standing, and the variations of these positions; but also the dynamic postures of the body in motion, or in action, for it is here that posture becomes most important, and most effective. Posture has a direct relation to the comfort, mechanical efficiency and physiological functioning of the individual.

The Baby's Posture

The posture of the newborn baby is quite different from that of the adult, or even the older child. The whole spine and trunk as well as the hips, knees, and ankles are flexed (bent forward) resembling the animal position on all fours more than the erect adult position. Gradually during the first year of life the trunk, hips and knees straighten, the head is held up, and the infant learns to roll over, sit, creep, stand, climb, and finally walk with support. Walking and running develop almost simultaneously, at first with the hips and knees slightly flexed, the legs well apart and the arms elevated for balance. The arches of the infant are usually relaxed, and the legs slightly bowed. When he stands, it should be largely on firm flat surfaces, during this peri-

od. His shoes should have strong, flat soles, and should be worn only part of the time. His bed should also be firm and flat, preferably with a springless mattress on a full-sized board.

The Child's Posture

As the child grows, walking, running, and standing are perfected, and approach the adult in appearance. Turning, jumping, getting up and down, and climbing develop, and special skills in balance and coordination such as skating, tricycle or bicycle riding, and swimming may be attained. Movements in the pre-school years become more purposeful and more effective, and often attain considerable smoothness and grace. Formal sports, especially the ball games, come into use during the school years, and the child's movements often become more restrained by the conventions of sport and society. Adult physical activities usually become quite limited because of convention and also in some cases from a constitutional tendency to be inactive.

The Lying Posture

Lying may be considered the fundamental human posture, since it usually occupies more hours of the day, and the position is more easily assumed than any other. However, it has many varieties. One may lie on the back or face, in which the position is fundamentally the same, with the body extended and the legs rolled outward. On the side, the hips and knees are usually flexed and the shoulders brought forward. The spine may also be flexed. The arm or leg may be flexed, abducted (moved away from the body), or rotated, whatever the general

body position. A pillow is advisable to keep the head level with the trunk when one is lying on the side, is optional when lying on the back, and is undesirable when lying face-down. The positions of the extremities are changed frequently during sleep, and the body is usually turned at intervals. A sagging bed relaxes the muscles and ligaments of the upper part of the body, but stretches those on the opposite side, and tends to distort the abdominal organs and chest. All inner-spring mattresses and most bed springs have an undesirable amount of sag, especially with a heavy occupant or two, and many of them bound like a rocking-horse when one moves. The best mattress from the hygienic standpoint is one of felted cotton, or hair, thick enough for comfort; it is usually desirable to place a piece of plywood or wallboard, the size of the bed, between mattress and bedsprings. This permits a certain amount of springiness without sagging.

The Sitting Posture

Like lying down, the sitting position is subject to considerable variation, depending both on the person and the chair in which he sits. The ideal chair is of the dining room or office type with arms, erect and firm. The seat height should be equal to the length of the legs from bottom of heel to back of knee. A lower chair concentrates the weight on the buttocks and causes slumping of the lumbar spine. A higher chair causes the legs to dangle, with

uncomfortable pressure above the knees, and even numbness and tingling due to pressure on the sciatic nerve. The depth of the seat from back to front should be equal to the length of the thigh from the buttocks to the back of the knee. A lesser depth of seat gives insufficient support to the thighs. A greater depth requires slumping of the lumbar spine or doubling the legs up on the seat.

The back of the chair should be smooth and fairly flat crosswise, but shaped to the normal vertical curve of the back. Ridges caused by the upright or crossbars are apt to be uncomfortable. The crossbar of the low-back chair should fit comfortably against the small of the back. Round-back Windsor or opera chairs are an undesirable type as they cause the shoulders and chest to droop.

The large, low, soft armchairs frequently seen in living rooms are soft and feathery, but usually fit very poorly. The seats are too low and too deep, and almost invariably cause a slumped or doubled up position, particularly in shorter individuals. Some of the modern sofas are similarly constructed. A chair built for repose may be made for a semi-reclining position, but the seat depth should be proper, and usually the feet and legs should be supported. The basic sitting position should be similar to the standing position (below) except that the hips and knees are flexed to a right angle.

The Standing Posture

The standing position may best be thought of as a basic position from which constant changes are made rather than as a position continuously held. This basic position has certain ideal characteristics. The body should be vertical and essentially straight when seen from the side as well as from the back. The ear, shoulder, center of the hip, and ankle should attain the vertical line when seen from the side; the thoracic and lumbar spinal curves should be slight, and the pelvis erect rather than tilted forward. The feet and

Dr. M. B. Howorth is a well-qualified orthopedic surgeon. Other articles by him that may be read by those who are interested in health and hygiene and particularly in questions relating to posture, which have previously appeared in CR's Bulletins, are: *The Art and Technique of Walking*, March 1944; *The Art of Sleeping*, February 1944; *What to Look for in Buying Shoes*, July 1943; *What's Wrong with Your Feet*, June 1943; and *Fitting Your Shoes to Your Feet*, May 1943.

knees should be directed forward, and the arches should not sag. The chest should be erect but not fully expanded, the abdomen flat and relaxed, neither sagging nor retracted. The shoulders should rest comfortably on the chest, rather than be held rigidly back with the arms turned outward. The body should achieve its full height in this position, with the eyes and chin level, not tilted back. The weight should be slightly more on the heels, although in the dynamic position of expected forward movement the weight should shift toward the toes.

Shifting the weight back or forward alters the reflex effect on the muscles, and for simple standing the best reflex muscle tones are attained in the former position, whereas for anticipated movement the tones are better with the weight forward. Most important, one stands erect with one's spine rather than one's shoulders, chest, or abdomen and there should be no tension in the chest, abdomen, or extremities.

The basic standing position is varied constantly during standing, for comfort, for the many social usages and for purposeful movements. The weight may be shifted from one leg to the other, or backward or forward, allowing stretched or tense muscles or ligaments to relax. Similarly, various portions of the body may be shifted slightly. The body in motion tires less readily than the tense and rigid body. Even the soldier spends very little of his time rigidly at attention and may even faint if required to remain so for long.

Individual Types

Certain individuals are "tense," with overactive (hypertonic) muscles and nerves, causing abnormal pulls by the more tense muscles, affecting not only posture but performance. Others are "muscle bound," with short, strong muscles and ligaments, which cannot be fully stretched out, also effecting posture and mode of working. Others are "relaxed," because of hypotonic nerves and muscles, or elongated muscles and ligaments, with joints which extend too far. "Weak arches" are a common manifestation of such relaxation. There are structural abnormalities too, such as bowed legs, knock-knees, wry necks, stooped backs, curvatures of the spine, and weak lumbo-sacral joints which may affect posture. Occasionally disease of the spine may be responsible for poor posture.

Certain factors tend to upset the ideal position. Fatigue, lack of sleep, malnutrition, or mental depression cause drooping, and the pelvis shifts and tilts forward, the abdomen protrudes, and the chest flattens. Clothes which are too small or too tight also tend to cause imbalanced posture. The corpulent abdomen throws the body off balance and the upper trunk and head are thrown back to maintain balance, resulting in a sway-back posture and back strain. Late pregnancy has a similar effect. The tall individual may stoop to reduce his height to that of his neighbors, to fit his clothes, doorways, stairs, furniture, and Pullman berths. High heels tend to throw the weight forward; this effect must be counter-balanced by swaying the back, or flexing the knees and hips; either of these compensations is

apt to be uncomfortable and fatiguing.

Effects of Poor Posture

Bad posture is usually the easiest and most natural position for the individual at the moment he assumes it, and provides relaxation and rest for certain muscles and for the body as a whole. It is continuous or habitual bad posture, however, which is really harmful. Bad posture over-stretches some of the muscles and ligaments while relaxing others, and allows the stronger or shortened ones to contract further, increasing the bad effect, e.g., the calf muscles shorten when high heels are worn. Poor posture reduces the circulation locally and generally, perhaps serving a temporarily useful purpose during relaxation, but, if continued, diminishing the metabolism and efficiency of the cells and tissues, inducing sluggishness and drowsiness. Breathing is shallow, with reduced oxygen available for the tissues. The abdominal organs sag (ptosis), and perform poorly, often with discomfort, resulting in constipation and headache. The physical and mental attitude is one of depression and sluggishness. Backache and fatigue are frequent symptoms of bad posture, and consequently stooping, heavy work, and participation in sports are frequently avoided.

Posture Correction

A thorough and competent medical examination of the whole patient as well as his posture is a necessary prelude to proper treatment. X-ray may be desirable for locating one of the underlying causes of bad posture. Physiological conditions such as faulty nutrition and hygiene, lack of sleep, fresh air, and sunlight should be corrected. The extrinsic factors, such as the bed, chair, desk, and lighting, and shoes and clothing should be corrected. Infection in teeth or tonsils should be cleared up, likewise constipation, abnormalities of the feet, legs, and spine should be corrected where pos-

sible, or treated if need be. Painful conditions may require preliminary massage and heat. Tense or muscle-bound individuals must be taught to relax. The patient must understand that posture is a 24 hour proposition, and that only he can correct it, then only if he knows how, wishes to do it, and applies himself continuously. The psychological treatment of these persons is often as important as the physical.

Exercises must constitute the principal direct treatment, since the muscles are the only controllable element in posture. Special exercises and posture training are the key to the situation, and are fundamental to the development of proper tone, relaxation and coordination in the muscles. Exercises for developing tone and strength are given to relaxed in-

dividuals, whereas the muscle-bound or tense person is given stretchings or taught relaxation. Sports are fitted into the program by prescription. Swimming should come early, as it can be done with little effort, and uses the trunk as well as arm and leg muscles and develops coordination. Esthetic dancing, tumbling, and rock climbing are excellent, as well as the gymnasium bars. Wrestling and boxing develop the whole body, if not carried to the point of injury. Ball games develop arm and leg muscles and breathing, but are less useful for the trunk. Rowing is good for the shoulder girdle muscles. These activities tend to improve static posture, and also dynamic posture, which is the posture or succession of postures assumed in motion, or in preparation for action.



"Puffed" Cereal Breakfast Foods

PUFFED GRAINS, such as wheat and rice, have been found to have the quality of their protein impaired in the manufacturing process. In this process the grains are pre-heated with steam under high pressure, followed by sudden release of the pressure. While heat-processing of the cereal lowers the biologic value of its protein, the damage is particularly great in the case of "puffed" grains. Rats used in the experiments indicated the value of instinct in animals in determining choice of superior food over an inferior one, for they showed great preference for rolled oats over the puffed grain.

The loss in biologic value of a gun-exploited oats-corn-rye cereal was striking; yet an unpuffed mixture of the same grains gave excellent growth in

test animals. (Puffed oats, for example, gave only one-fifth the growth obtained from the rolled oats.)

These discoveries are of particular interest at this time of protein shortage, for it is obviously necessary that every means should be taken to avoid loss in the biologic value of the protein that is available for consumption. To the consumer, the report also significantly illustrates an all-too-common aspect of the work of nutritional researchers—the great lag between the time when a new food material or commercial food product is offered for sale or comes into wide use, and the time when experts go to work on the problem of determining whether the new food is *desirable* from the standpoint of the consumer.

Soaps and Creams



for Shaving



SOFTENING the whiskers so that they can be removed with a minimum of time and discomfort is one of man's eternal problems. There are a considerable number of men who have managed to use the electric razor effectively, but a majority still prefer the old-fashioned soap or cream and a safety razor.

Some years ago Messrs. Lester Hollander and Elbridge J. Casselman published a study of shaving that is still considered to be the definitive work in this field. They presented the conclusions reached by observations of thirty-one scientists, who participated in shaving tests for a period of four years. Their findings, briefly expressed, were that a successful shave depended on a sharp blade, properly softened hair, and application of the razor at the proper angle.

Softening the whiskers was found to be most effectively accomplished, in the shortest time, by the use of soap and hot water. The technique evolved included washing the face with toilet soap and hot water, rinsing it thoroughly to remove dirt, sweat, and sebum (oily secretion of the sebaceous glands), then rubbing shaving cream on the face and working up a copious lather for two and one-half to three minutes,

using plenty of hot water.

The preference for soap or lathering creams over the more recently developed brushless or non-lathering type is two-to-one, according to one study. In another survey made in 1944 by a mid-western newspaper, a little over 37 percent of the men queried used regular shaving cream, while a little over 23 percent preferred the brushless type.

Various criteria have been set up for a good lathering cream. One of the leading cosmetic trade journals suggested that a really first-class cream should among other things be sufficiently tacky to adhere to the face and brush, be easily washed off after shaving, have a soothing action on the skin, and produce abundant lather with a minimum of rubbing. The lather in turn should not dry the face during shaving, should possess good wetting and beard-softening action, should support the hairs in an erect position so that the razor may approach them from the proper angle, and be sufficiently lubricating to allow free movement of the razor over the skin.

It appears that considerable research has been carried out on the subject of lather. It is considered desirable that the bubbles composing the lather be of very minute size; small

bubble size helps to enhance the wetting and beard-softening action of the soap by bringing the soap solution more intimately into contact with the beard. Lathering creams are customarily at least 50 percent soap, the balance being water and glycerin.

Having in mind this high content of materials other than soap, and the necessarily expensive packaging of creams in tubes and jars, one can readily see that, from the standpoint of economy, the shaving soaps or cup soaps will give the most economical shaves.

The use of glycerin in cosmetics is a much debated subject and, in excessive amounts, the material is considered undesirable by reason of its hygroscopic character (tendency to take up moisture from the air or other substances with which it is in contact). Thus it may have a drying effect on the skin, by extracting the natural moisture from the tissues. The amount of glycerin in lathering creams ranges from five percent to as much as 20 percent. Ten percent is considered the desirable top limit since larger amounts are likely to make the lather too watery, or thin. From the manufacturing standpoint it is considered necessary to include some glycerin in the formula to keep the

preparation smooth and free from lumps, and to provide lubricating quality.

Menthol or oil of peppermint is sometimes used to give a cooling sensation. There is some doubt, however, of the desirability of using such materials on the face day in and day out, for they may cause irritation to sensitive skins. Phenol (carbolic acid), which has somewhat the same effect, is sometimes found in shaving creams, but CR considers that it has no proper place in a toilet preparation.

The essential ingredient of the non-lathering brushless shaving creams is stearic acid with lubricants, such as mineral oil, lanolin, or vegetable oils. The brushless creams are somewhat akin to vanishing cream in formula. According to the Hollander and Casselman studies, the softening action of these preparations was slower than that of soap, and the stiffer brands tended to clog the razor. Brushless creams were found also to have a tendency to decrease the useful life of the razor blade. In an effort to overcome this difficulty, a patent has been taken out covering the inclusion of a small amount of chromate in a brushless cream. It would seem unwise to use such a product regularly on the face, for chromates must be classed among the poisons, being caustic, and even in minute amounts they may cause chronic irritation if used frequently.

In substance the Federal government specifications for shaving cream require the lathering-cream type to be a soft, uniform cream or paste free from alkali, of such consistency that it will not flow from the tube without pressure, and not lose its form when extruded. It is

to be such as to be distributed well into the bristles of a shaving brush and must produce a heavy, creamy lather that will remain moist on the face until shaving is completed. The brushless cream is to be a soft, uniform cream or paste, free from alkali, that will remain soft in the tube and spread easily. The methods of test for "consistency" and "lathering" have not as yet been satisfactorily formulated by technical men.

Shaving soaps are available in round cakes and sticks. Two brands of cake soap were included in this test. The soaps are generally satisfactory, although some may find them more inconvenient to use than some of the other types, and they represent by far the least expensive type of shaving preparation. The cake shaving soaps may also be used as toilet soaps, and are very satisfac-

tory for this use.

In order to secure some comparative performance data on the various creams currently available, CR had a number of well-known brands tested for persistency of lather by dropping a measured quantity of each shaving cream in a test tube, adding water till the tube was two-thirds full, and subjecting the tubes to a uniform shaking. The persistence of the foam was determined by timing. The amount of shaving cream needed to secure a good shave was measured and the alkalinity (pH) was tested. It was estimated that there are about 20 shaves per ounce of lathering cream. With the brushless creams, about 4 shaves per ounce could be obtained. With few exceptions there were no marked differences in the practical usefulness of different brands of the two types tested.

Comparison of Techniques of Shaving

With Lathering Cream or Soap

1. Wash the face thoroughly with toilet soap and hot water.
2. Rinse thoroughly.
3. Rub a suitable quantity of shaving cream on the face and lather thoroughly with hot water for three minutes. If cup soap is used, wet the brush and rub on the cake to a good lather.
4. Wet the razor with hot water and keep both the face and the razor constantly wet with hot water.
5. Hold the blade at an angle of about thirty degrees to the face.

At the conclusion of a shave the face *should be thoroughly rinsed and carefully dried.*

With Brushless Cream

1. Prepare the face by washing with toilet soap and water and leave a thin film of soap on the face for best results.
2. Apply a suitable quantity of the cream to the face and distribute it evenly.
3. If the beard is very tough, rub the cream in thoroughly with the fingers.
4. Allow one or two minutes to elapse before starting to shave.
5. Use the razor as directed under "Lathering Cream."

A fair number of the creams of both types were found to have an odor that would be more or less objectionable to those who smelled them. On this account it would be desirable to those who are sensitive to odors to smell the product before buying. For example, *Cuticura Soap Shaving Cream*, *Fitch's Brush Shaving Cream*, *Listerine Shaving Cream*, *Williams Luxury Shaving Cream*, and *Klenzo Brushless Shaving Cream*, it is believed are brands that have an odor that might be objectionable to some.

The ratings that follow are based chiefly on a series of use tests.

Lather-Type Shaving Creams

A. Recommended

Colgate Rapid-Shave Cream (Colgate-Palmolive-Peet Co., Jersey City, N.J.) 5 oz., 39c. Price per shave, 0.4c. **1**

Cuticura Soap Shaving Cream (Potter Drug & Chemical Corp., Malden, Mass.) 2½ oz., 35c. Price per shave, 0.7c. **1**

Fitch's Brush Shaving Cream (F. W. Fitch Mfg. Co., Des Moines, Bayonne, Los Angeles) 8 oz., 47c. Price per shave, 0.3c. **1**

Listerine Shaving Cream (Lambert Pharmacal Co., St. Louis) 3 oz., 35c. Price per shave, 0.6c. **1**

Marlin Lather Shave (Distrib. Marlin Firearms Co., New Haven, Conn.) 4.25 oz., 50c. Price per shave, 0.6c. **1**

McKesson's Shaving Cream (McKesson & Robbins, Inc., New York) 2½ oz., 25c. Price per shave, 0.5c. **1**

Mennen Lather Shave—Plain (The Mennen Co., Newark, N.J.) 4.25 oz., 50c. Price per shave, 0.6c. **1**

Palmolive Shave Cream (Colgate-Palmolive-Peet Co., Jersey City, N.J.) 5 oz., 39c. Price per shave, 0.4c. **1**

Williams Luxury Shaving Cream (The J. B. Williams Co., Glastonbury, Conn.) 4 oz., 39c. Price per shave, 0.5c. **1**

Lenthéric Lather Cream, No. 24003

(Distrib. Lenthéric, New York) 2½ oz., 50c. Price per shave, 0.9c. **2**
Yardley English Lavender Shaving Cream (Yardley, New York) 2.8 oz., 50c. Price per shave, 0.9c. **2**

B. Intermediate

All-American Lather Shave with Vervolan (American Pharmaceutical Co., Inc., New York) 3 oz., 33c. Price per shave, 0.55c. **1**

Gillette Lather Shaving Cream (Gillette Safety Razor Co., Boston) 3 oz., 25c. Price per shave, 0.4c. **1**

Ingram's Shaving Cream (Bristol-Myers Co., New York) A mentholated cream. 2 oz., 29c. Price per shave, 0.72c. Box marked 2.1 oz., jar, 2 oz. **1**

Lavender Mentholated Shaving Cream (Langlois, Inc., Boston) 6 oz., 48c. A mentholated cream. Price per shave, 0.4c. **1**

Lifebuoy Shaving Cream (Lever Bros. Co., Cambridge, Mass.) Probably contained phenol. Odor may be unpleasant to some. 2½ oz., 27c. Price per shave, 0.55c. **1**

Noxzema Shaving Cream (Noxzema Chemical Co., Baltimore) 2½ oz., 35c. A mentholated cream. Price per shave, 0.7c. **1**

Stag Shaving Cream (Langlois, Inc., Boston) 3¼ oz., 29c. Price per shave, 0.45c. **1**

Swav Shaving Cream (Norwich Pharmacal Co., Norwich, N.Y.) 3 oz., 35c. A mentholated cream. Price per shave, 0.6c. **1**

Brushless or Non-Lathering Shaving Creams

A. Recommended

Dabon Brushless Shaving Cream (Dr. Brown's Labs., Brooklyn, N.Y.) 14 oz., 49c. Price per shave, 0.9c. **2**

Gillette Brushless Shaving Cream (Gillette Safety Razor Co., Boston) 2½ oz., 25c. Price per shave, 2.5c. **3**

Klenzo Brushless Shaving Cream (United Drug Co., Boston) Somewhat softer than *Stag* made by same manufacturer. 6 oz., 39c. Price per shave, 1.6c. **3**

Listerine Brushless Shaving Cream (Lambert Pharmacal Co., St. Louis) 2.9 oz., 25c. Price per shave, 2.2c. **3**

Mennen Brushless Shave (The Mennen Co., Newark, N.J.) 4¾ oz., 50c. Price per shave, 2.6c. **3**

Palmolive Brushless Shave (Colgate-Palmolive-Peet Co., Jersey City,

N.J.) 2½ oz., 27c. Price per shave, 3c. **3**
Stag Brushless Shaving Cream (Langlois Inc., Boston) 4.8 oz., 35c. Price per shave, 1.8c. **3**

B. Intermediate

Krank's Brushless ShaveKreem with Diexin (Consolidated Royal Chemical Corp., Chicago) 1 lb., 49c. Odor may be unpleasant to some. Price per shave, 0.75c. **1**

Krank LatherKreem (A. J. Krank Co., St. Paul) ½ lb., 29c. Not a lather cream as name implies. Odor may be unpleasant to some. No difference in performance distinguishable between this and the *Krank* cream containing *Diexin*. Price per shave, 0.9c. Same product in tube, 25c; price per shave, 1.3c. **2**

All-American Brushless Shave (American Pharmaceutical Co., Inc., New York) 5 oz., 39c. Some may consider the odor unpleasant. Price per shave, 2.0c. **3**

Barbasol Sanitary Beard Softener (Barbasol Co., Indianapolis) 4.9 oz., 50c. Thin, but otherwise good. Price per shave, 2.6c. **3**

Burma-Shave (Burma-Vita Co., Minneapolis) 5 oz., 35c. More effort needed for a good shave than with some other non-lathering creams. Some may consider the odor unpleasant. Price per shave, 1.8c. **3**

Colgate Brushless Shave (Colgate-Palmolive-Peet Co.) 2½ oz., 27c. Very thin, and successful use required a second application. Price per shave, 3c. **3**

Lenthéric Brushless Shaving Cream, No. 914 (Lenthéric, New York) 80 gm., 50c. Not fully satisfactory as the coating was thin. Price per shave, 4.4c. **3**

Marlin Brushless Cream (Distrib. Kenro Products, Inc., 17 E. 42nd, New York) 4.75 oz., 50c. Odor slightly phenolic, which some may consider unpleasant. Price per shave, 2.6c. **3**

Mollé Brushless Shaving Cream (Centaur Co., Div. of Sterling Drug, Inc., Bedford, Ohio) 4.7 oz., 45c. Very thick and "greasy." Price per shave, 2.4c. **3**

Squibb Brushless Shave (E. R. Squibb & Sons, New York) 3 oz., 39c. Thick and somewhat "greasy." Price per shave, 3.2c. **3**

(Concluded on page 26)



Men's White Shirts



THERE is a "serious shirt situation" this year—more serious than last. As one retailer has put it, according to a trade journal report:

It looks as though it were time for merchants to really get worried about the shirt situation...Not only for this fall and Christmas, but for next spring.

The shirt manufacturers tell us with sad faces and appropriate gestures that shirt allocations for fall will be very limited, maybe 25 or 30 per cent on white broadcloths...

It's bad enough to have to say "Yes, we have no pajamas, no underwear, no gloves, no hosiery," but no shirts, that's terrible! Shirts are the heart, soul, and entrails of any men's furnishings department.

From this it may be assumed that many a man who ordinarily finds shirts and more shirts under the tree at Christmas is likely to find few or none this year. Furthermore, the man who must buy some shirts to replace worn-out ones is likely to have difficulty in finding shirts of the quality he prefers in his favorite stores.

The thread count of the fabric may be lower. Pearl buttons will probably still be available, but it is possible that before long some shirt buttons will be glass, for at least one manufacturer, unable to obtain ocean pearl buttons in the quantities he required, has contracted for pearl-like glass buttons to be used on some special lines of shirts.

In some cases, pre-shrinking of the fabrics has been abandoned altogether, and although

the consumer won't notice it when buying the shirt, the shirt fabric may have been weakened by the strong chemicals that are now used sometimes to bleach it.

What to Look for in Buying

The man (or woman) who is buying shirts should keep in mind the following points that will help in selecting a good shirt:

1. Look for firm, smooth fabric with minimum sizing and with a surface free from fuzziness.

2. Stitching should be fine, and the seams should be well stitched so no raw edges show.

3. Buttonholes should be neatly and strongly stitched.

4. Buttons should be clear, smooth, and even, and sewed on securely. It is desirable that buttons should have three or four holes.

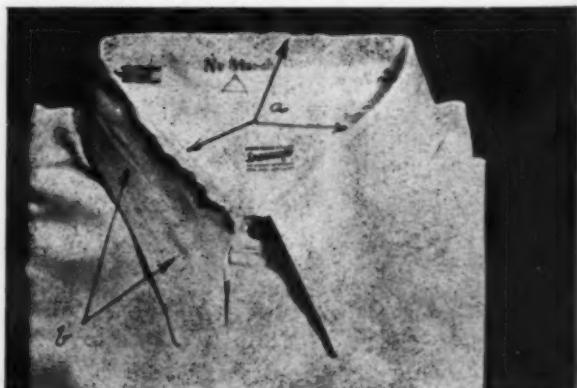
5. Shirts of the best workmanship have one-piece sleeves; however, sleeves pieced at the back of the arm may fit properly.

6. Sleeves should be pleated or gathered evenly to the cuffs, and the sleeve opening should be deep enough to permit the cuff to be laid flat for ironing.

7. The fullness in the back of the shirt should be either gathered or pleated over the shoulder blades—not in the center of the back.

8. It is best always to buy a shirt carrying a label saying that the material has been preshrunk. *Sanforizing* is supposed to shrink a fabric during manufacture so that it will not thereafter shrink more than one percent. In the present test, however, one *Sanforized* shirt laundered by a commercial laundry did shrink, in one direction, an amount about 3 times that allowance. Trade reports indicate that part of the difficulty with high shrinkage may be because of the extra severity of wartime laundering processes.

Maintenance of collar size with repeated laundering is particularly important, and the American Institute of Laundering standards provide that collars



Types of failures of a Trubenized, fused, or No-Wilt collar after comparatively few launderings. a—result of cracking at collar edge. b—blistering, or local ply-separation.

METHOD OF TAKING MEASUREMENT

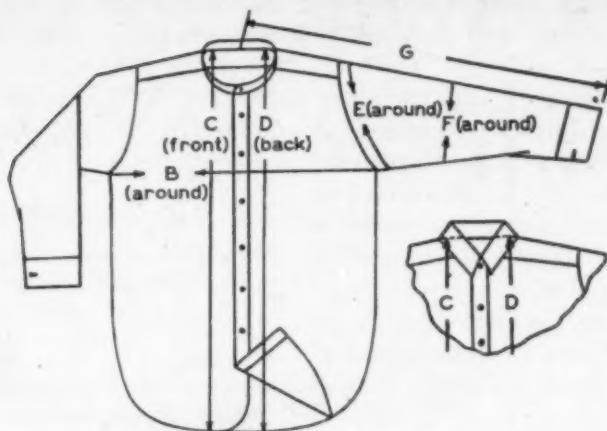


FIGURE I

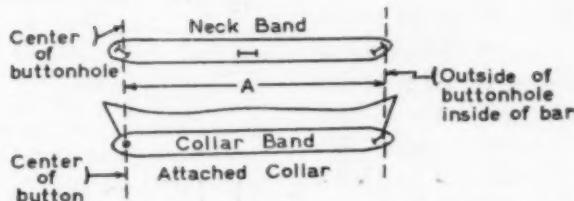


FIGURE II

lar shrinkage must not result in a size smaller than $\frac{1}{8}$ inch below the marked size after laundering. Sleeve length after repeated laundering should be not more than $\frac{1}{4}$ inch below marked size.

Getting the Right Size

Two figures you must know before you shop for shirts are neckband and sleeve lengths. If you are not sure of these sizes, you can determine them by measuring an old shirt that fits well. For neck measurement, lay the collar flat and measure on the inside surface of the neckband from the center of the button to the far or outside edge of the buttonhole. For the sleeve, measure from the center of the yoke at the bottom of the neckband to the end of the cuff. (See Figure I.)

Shirt sizes are ordinarily stamped on the collar or low

on the left side at the front. Collar size is stamped first, then sleeve length. "15-4" or "15-34" both mean a size 15 neck and a 34 sleeve.

Kinds of Collars

Most men prefer collars attached, and according to one source, the "fused" collar ranks first in popularity. The "fused" collar has three layers of cloth and has been treated with chemicals and heat so that the three pieces of material stick together. These collars need no starch. They are, however, likely to fail by a separation of the plies or "blistering" which makes the collar unsightly. They may also crack and wear out at the edge of the collar fold.

The *Van Heusen* collar, while of the non-wilt type, is not a "fused" collar. It is made of heavy woven cloth of single

thickness and is bound on the under side with a lightweight tape. This collar does not require starch and, in CR's current test, was found to be very satisfactory and held its appearance very well.

The plain collar is made of three layers of cloth (front, back, and lining), all separate and secured together only by the edge stitching. Some of these collars are fitted with celluloid strips acting as stays or supports which fit in pockets on the inner side of the collar fronts and keep the collar trim. These strips are removed when the shirts are sent to the laundry and replaced on their return.

Laundering

The tests made by CR included laundering by a commercial laundry. The shirts showed definitely the effects of good or bad laundering practice. Collars particularly show the result of ironing, for the collar of a given shirt after a single laundering may be so unsightly that a careful dresser would not care to wear the shirt, yet the next laundering may leave it with a good appearance.

Considering the present shortage of shirts, the housewife who does her own laundering will wish to use every means to prevent deterioration in the laundering process. Shirts should be washed in mild soapsuds. If it is necessary to use a chemical bleach, the shirts should be left in the solution only long enough to whiten them and they must then be carefully and thoroughly rinsed. It is better, if possible, to whiten shirts by drying them in the sun. Non-wilt collars should never be starched and should be ironed when they are damp.

In ironing, be sure to set the indicator for the proper heat. An iron that is too hot will weaken the material, even though there may be no apparent scorch or even the faintest discoloration of the fabric. Since the "fusing" of a shirt collar is done with acetate rayon, the highest safe setting of an iron for ironing such collars will be that suitable for ironing rayons, that is not over 325°F. Collars will survive laundering better if they are turned up before being put in the washer or sent to the laundry. Fused collars, particularly, should be turned up and held flat when they are put through a wringer to avoid creases.

Excessive use of starch is bad for shirts, for it tends to make the fibers of the collar brittle and increase their tendency to break at the fold. It would be well to instruct the laundry to avoid the use of starch in broadcloth and similar shirts when the wearer's work or preferences do not require starching. In any case, light or medium starching should be used.

CR's Tests

In the test recently concluded by Consumers' Research, 16 white shirts with collars attached were examined as to construction and workmanship and measured to determine the correctness with which they had been cut and tailored as to size. In this connection, the consumer should remember that shirts, except those for military use on government orders and for Lend-Lease, are still being made shorter than formerly—30 inches now being the standard length instead of 33 inches. This may be a matter of no importance to a man of medium or small height, but tall men are likely

to find the war-length shirts troublesome because of the way in which they will pull out in wearing.

Tests were made to determine the bursting strength of the fabrics, and the durability as determined by the effect of laundering by a commercial laundry. Shrinkage of collars and sleeves was also determined, a tolerance of $\frac{1}{8}$ inch being allowed in collar size, and $\frac{1}{4}$ inch in sleeve size. Unless otherwise stated, residual shrinkage in the body was found to be less than 1%, the amount of shrinkage which CR considers permissible.

All the shirts were of white broadcloth except the *Jayson*, which appeared to be a white percale. A top-grade broadcloth shirt of some years ago was likely to have a nominal thread count of 144 x 76 before finishing. (Finishing increases the thread count in the warp and decreases the thread count in the filling by about 4 to 5 percent.) Lower grades of broadcloth have nominal thread counts of 136 x 60 or 128 x 68. Several shirts in the present test had thread counts in these lower grades; some had even lower counts. From considerations both of appearance and probable strength, it will be desirable to purchase shirts having the highest thread count obtainable in the desired price range. Comparison of the appearance of a shirt being considered for purchase, with that of another fabric of known high thread count, will enable one to tell by simple inspection whether the new shirt has a thread count corresponding to one of the better grades of broadcloth. Construction and workmanship of all shirts were judged good unless otherwise noted.

None of the shirts tested were deemed to deserve an *A* rating; all were found deficient in one or more respects. The first shirt listed, however, was judged to be superior to the others listed.

B. Intermediate

Arrow Hitt (Cluett Peabody & Co., Inc., Troy, N.Y.) \$2.24. Size 15 $\frac{1}{2}$ x 33. Fused or non-wilt collar. *Sanforized*. Bursting strength, good. Thread count, 140 x 62. Appearance of collar not affected appreciably by launderings received during test. 2

* * * *

Pilgrim Fashion Tower (Sears-Roebuck's Cat. No. 33-30) \$1.46, plus postage. Size 15 $\frac{1}{2}$ x 33. Fused collar. *Sanforized*. Bursting strength, fair. Thread count, 122 x 58. Appearance of collar slightly affected by launderings. 1

Horton Collarite (Phillips-Jones Corp., 1225 B'way, New York 1, New York) \$1.98. Size 15 $\frac{1}{2}$ x 32. Fused collar. Bursting strength, very good and highest of those tested. Thread count, 140 x 60. Appearance of collar badly affected by launderings. Shrinkage in one direction (body of shirt) was 3 times the allowable limit of 1%. 2

Permawear (Raugh Shirt Mfg. Co., Cincinnati) \$2.25. Size 15 $\frac{1}{2}$ x 34. Fused collar. Bursting strength, good. Thread count, 142 x 60. Appearance of collar badly affected by launderings. Shrinkage in one direction (body of shirt) was 3 times the allowable limit of 1%. Workmanship judged fair. 2

Van Heusen (Phillips-Jones Corp.) \$2.25. Size 15 $\frac{1}{2}$ x 33. *Van Heusen* non-wilt collar, not of the fused type. *Sanforized*. Bursting strength, fair. Thread count, 142 x 62. Appearance of collar not affected appreciably by launderings during test. 2

Bean's "Business Man" (L. L. Bean, Inc., Freeport, Maine) \$2.35. Size, 15 $\frac{1}{2}$ x 33. "Angle stay collar"—soft collar with celluloid stays. Bursting strength, good. Thread count, 144 x 76. Appearance of collar badly affected by launderings. Shrinkage in one direction (body of shirt) was twice the allowable limit of 1% for a pre-shrunk fabric. 3

Bedford (The Bedford Mfg. Corp., 200 Fifth Ave., New York 18, New

York) \$2.75. Size 15½ x 34. Soft collar. *Ess-Kay-Seven Sanforized*. Bursting strength, good. Thread count, 138 x 62. Appearance of collar badly affected by launderings. Shrinkage in one direction (body of shirt) was twice the allowable limit of 1%. **3**

Jayson (F. Jacobson & Sons, 1115 B'way, New York 10, New York) \$2.95. Size 15 x 33. Soft collar. Bursting strength, good. Thread count 102 x 98. Percale, not a broadcloth (a true broadcloth has approximately twice as many warp as filling threads). Appearance of collar badly affected by launderings. Workmanship judged fair. **3**

C. Not Recommended

Wards Thrift Quality (Montgomery Ward's Cat. No. 35—2781) \$1.38, plus postage. Size 15½ x 33. Non-wilt collar. Bursting strength, poor, lowest of shirts tested. Thread count, 112 x 60, one of the two poorest tested in that respect. Appearance of collar considerably affected by launderings. Shrinkage in one direction (body of shirt) was twice the allowable limit of 1%. **1**

Brandon (Montgomery Ward's Cat. No. 35—2475) \$1.79, plus postage.

Size 15½ x 33. Fused collar. Bursting strength, fair. Thread count, 130 x 68. Appearance of collar badly affected by launderings. Shrinkage in one direction (body of shirt) was twice the allowable limit of 1%. **2**
Mohawk (Superior Shirt Co., 1216 Arch St., Philadelphia) \$2.25. Size 15½ x 33. Fused collar. Bursting strength, poor. Thread count, 114 x 62, one of the two poorest tested in that respect. Appearance of collar slightly affected by launderings. **2**
Towncraft (J. C. Penney Stores) \$1.65. Size 15½ x 32. "Nucraft" non-wilt collar. *Sanforized*. Bursting strength, good. Thread count, 140 x 60. Appearance of collar slightly affected by launderings. Some wear of collar due to launderings noticeable. Shrinkage in one direction (body of shirt) 2½ times and in the other direction, 1½ times the allowable limit of 1%. **2**

Wilson (Wilson Bros., 180 Madison Ave., New York 16, New York) \$1.85. Size 15½ x 33. Soft collar. Bursting strength, poor. Thread count, 130 x 64. Appearance of collar considerably affected by launderings. Shrinkage in one direction 3 times the allowable limit of 1%. Workmanship judged fair. **2**

Lion of Troy (M. Nirenberg Sons,

Inc., 1140 B'way, New York 1, New York) \$2.50. Size 15½ x 33. "Lionized" fused collar. *Sanforized*.

Bursting strength, fair. Thread count, 142 x 60. Appearance of collar slightly affected by launderings; some wear noticeable. Fabric appearance not quite satisfactory as it had an uneven appearance at some points. Shrinkage in one direction (body of shirt) was 3 times the allowable limit of 1%. **3**

Manhattan (Manhattan Shirt Co., 444 Madison Ave., New York 22, New York) \$2.50. Size 15½ x 33. "Sello" soft collar with celluloid stays. Bursting strength, fair. Thread count, 138 x 60. Appearance of collar badly affected by launderings. Shrinkage in one direction (body of shirt) was 3½ times the allowable limit of 1%. **3**

Pilgrim Nobility (Sears-Roebuck's Cat. No. 33—133) \$2.60, plus postage. Size 15½ x 33. Soft collar with celluloid stays. Bursting strength, good. Thread count, 122 x 58. Appearance of collar badly affected by launderings. Shrinkage below marked size in sleeve, 1 inch. Shrinkage in one direction (body of shirt) 3 times, and in the other direction, twice the allowable limit of 1%. **3**

★ Don't Burn Autumn Leaves! ★

THE TIME for the fall of autumn leaves is here. The experts advise against burning these, since when they are burned, valuable soil nutrients are wasted. Leaves, when composted, are valuable for improving the physical condition of the soil and also supply some plant food. If you have no use for the leaves that fall on your lawn, perhaps your neighbor who has a garden will be glad to take them away and use them. Leaves make a quick-rotting compost and are easily piled, preferably in a pit in backyard or garden, to be worked into soil in the following spring.

Leaf mold from any source is prized as a conditioner of soil

for plant growth by gardeners generally, and any difficulties which might arise from the acidity of certain leaf molds can be readily corrected by the use of lime in proper quantities. Lime is commonly recommended to be added to compost heaps that contain coarse plant material, such as thick-stemmed weeds and oak leaves, for the purpose of hastening decomposition. The lime favors the action of nitrifying organisms and acts as a guarantee against any acidity which might otherwise be developed in the process of composting. One authority goes so far as to say that any plant material which is free from troublesome vegetable disease

and which will decay satisfactorily is suitable for composting. Decay of coarse materials can be hastened, too, by the addition of nitrogenous matter, either organic or inorganic, such as nitrogen-carrying fertilizer, or protein materials.

Gardeners have the idea that oak leaves produce composts which are too acid, but this is not necessarily true, although it is a fact that soils in hardwood forests of the Northeast are frequently of an acid character. This may be due to a number of reasons which may not be related to the nature of the foliage and which go back to such factors as temperature, rainfall, and nature of original rock material.

Off the Editor's Chest

[Continued from page 2]

One shoe trade journal suggested "A good dose of the vitamin of SALESMANSHIP would benefit most every store. The attitude of 'take it or leave it,' 'customer-be-damned' goes out the back door and the boss himself throws away his crying towel and puts on a smile of greeting to each and every customer entering the front door." Elmer Wheeler, the noted expert on salesmanship, pointed out that he had a little black book in which he was listing all discourtesies, insults, impoliteness, and poor service rendered him under the excuse that "There's a war on." He planned to avoid every establishment where he was high-hatted or otherwise pushed around, and take his business elsewhere, in post-war days.

Consumers may well emulate Mr. Wheeler's example and make it a point to patronize shops and services where they have been given considerate treatment, even though the desired commodities were not always available. No doubt in time psychologists and historians will analyze the wartime merchandising situation and disclose just what made those in contact with the consuming public act as if the consumer should have *known* that no 12SA7 radio tubes were available and that he had no right whatever to expect to find an article of the desired type and of good quality in a dealer's shop.

It is true that trained help of any kind has been scarce, and perhaps the idea of being indispensable, because no one else is available for the job, goes to people's heads, so that many are tempted to act like little Caesars. Possibly the sales people, waitresses and others have been unconsciously reflecting the attitude of our leaders in public life, whose outlook was well summed up by a letter

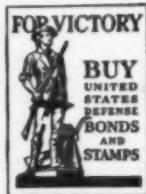
from an Idaho reader, to a weekly news magazine, who wrote:

"Almost daily we are told [this was written in 1942] by our leaders that the apathy and complacency of the common people may make us lose the war. We are told that the all-important thing is for the masses to become aroused. We pay our taxes and are ready to pay more, we volunteer for civilian defense, we buy bonds and contribute to the Red Cross and other organizations. We do without things we had thought were necessities, are willing to lower our standards of living, raise our hours and speed of work. . . . I resent being made the scapegoat by the men whose voices are heard." A Kansan wrote: "These people believe that rationing is being handled by a group of bureaucrats in Washington who are more concerned about keeping their jobs and making us war conscious than in winning the war."

No doubt the casual and sometimes even arrogant attitude of merchants toward their customers and prospective customers has been in part a reflection of the state of mind and manners of the people in official government positions who were accustomed in speech and in print to scorn or belittle the services and state of mind of those who have given their men to the armed forces and almost without exception taken on extra jobs, extra responsibilities and duties, filled out forms in endless variety and complexity, worn out their precious cars and tires and used their gasoline in the performance of a myriad time-consuming public services requested or required by governmental agencies.

Possibly the consumer's first concern should be with the matter of correcting the manners of the public servants whose duty is to

serve taxpayers. Those in public office need constantly to be reminded that they are the employees, not the rulers of the American public; they should, instead of forever telling us our duty, set an example of frugality in expenditure of public funds, of modesty, reserve, and consideration for the rest of the people, their employers. Where their service has not been good, it can be readily dispensed with by proper action when election time comes around for selection of state, and particularly of federal, officials. (State officials tend to behave themselves better on the whole because they are nearer home, and so more easily and quickly brought to book for their derelictions, since they are not so fully protected by massive bureaucratic machinery.) Perhaps the elimination of some of those responsible for the selection and retention of our more arrogant and officious bureaucrats will help to improve the manners of those who remain in office, by reminding them that it is their job to *serve* the public, efficiently and with a minimum of red-tape and self-puffing publicity, not to "push people around" or "tell them off."



**BUY STILL
MORE WAR
BONDS AND
STAMPS**

Cold Permanent-Wave Solutions

How Safe Are They?

By C. A. TYLER, PH. D.

THE recently developed cold permanent waves may be expected to have sales appeal both as something new and as something which sounds convenient and safe as compared with a wave set by heat. A chemical, however, which attacks the hair sufficiently to make it curl, may itself offer some possibility of injury, perhaps to the skin, or possibly from its vapors. It is important, at the very least, to establish in so far as possible that it is not dangerous in use; in fact such a practice is accepted as necessary for new cosmetic products which are to come in contact with the skin.

The most feasible and satisfactory method of trying out new products before they are used on human subjects is to make tests with experimental animals. Such tests are subject to careful control and in the hands of experienced workers afford valid evidence as to the toxicity or freedom from toxicity of a given product.

In studying the effect of a new compound or material, it is established practice to set up all experiments so that the conditions will be much more drastic than they would be in normal use. The purpose is to intensify any ill effects, that is, to exaggerate unfavorable conditions, so that if any injury might result from normal use over a considerable period, it would surely show up in the experimental work.

One cold-wave solution, which has been passed by the

Food and Drug Administration as comparatively safe, contains a thioglycollate compound. The experimental evidence to support the F. and D. Admin.'s conclusion was obtained by work with rabbits. In order to understand what correlation may exist between the solution being applied to human hair and being tested on animals, it is necessary to know how it is used in the beauty parlor:

¶ The hair, first wet thoroughly with water, is wound in small portions around specially constructed hollow bars or mandrels, perforated to allow passage of liquid through them and on to the hair.

¶ When all of the hair has been wound on these mandrel curlers, they are connected by tubes to a vessel which holds the waving solution.

¶ With the aid of a siphon arrangement, the wave solution is forced out of the mandrels through the hair and on to the scalp, from which it drains back into the original vessel. Normally not more than 5 fluid ounces or 150 milliliters of wave solution are used. The original solution is of course diluted by the water on the hair, so that its concentration is about half what it was before dilution. This solution is forced through the wound hair a number of times during a period of about 10 minutes.

¶ The liquid is then drained off, leaving about an ounce to be rinsed out of the hair with 2 to 4 gallons of fresh water.

¶ As a final step a very dilute

solution of hydrogen peroxide is forced through the hair before the mandrels are removed. This is to decompose any remaining trace of the original chemical.

¶ The hair is then unwound and hair and scalp washed thoroughly in fresh water, after which the hair is set in the usual manner.

In order to cover every possible source of danger and to obtain definite results one way or the other, four types of experiments with rabbits were set up: (1) exposure of the skin to the wave solution, (2) inhalation of the vapors, (3) feeding tests, and (4) intravenous injections. The data obtained are presented in brief, with the conclusions to be drawn.

At the same time that the thioglycollate solution was used, an ammonium hydrosulfide solution was submitted to the same tests. This was among the first of the chemicals tried for cold waving and in commercial use was known as the Willat Wave, against which the Food and Drug Administration took action a few years ago because of the dangers involved in its use. The results with this definitely injurious solution serve as a contrast to those obtained with thioglycollate.

Skin Exposure

Patch tests of the undiluted wave solutions were made under three conditions: (a) in contact with the natural fur and skin of the animal, (b) in contact with an area of skin

from which the fur had been shaved, and (c) in contact with a shaved area of skin on which two superficial cuts had been made with a razor blade. The last was to simulate a condition where the skin of the person had been scratched enough to cause very slight bleeding—a condition which might be encountered in normal use of the solution. Cotton wet with the sample solution was applied to the areas described and held in place by watch glasses taped over them.

After 24 hours contact the cotton and watch glasses were removed. It was found that the cotton was still moist in all cases. Observations were made immediately. Photographs were taken of the two conditions of shaved skin just before application and just after removal of the patches.

No reaction was obtained with the thioglycollate solution applied to unshaved skin. The skin which was shaved, however, showed redness and inflammation, while the skin which was shaved and abraded showed more marked inflammation. The animals were held for observation for 7 days, and at the end of this period the skin was again normal in each case. These results show that the undiluted thioglycollate solution may produce a marked dermatitis on shaved and abraded skin by 24 hours' contact, but it had no serious poisoning effect.

With the hydrosulfide solution, similarly no reaction was obtained with the solution applied to the unshaved skin. But with the shaved skin blisters and redness appeared, and where the skin was shaved and abraded, marked local irrita-

tion was accompanied by large blisters, bluish black discoloration, and a gangrenous condition of the skin. Even these spots, however, healed after 7 days; thus contact with the solution under these severe conditions did not prove lethal.

Inhalation Tests

Rabbits were placed in fiberboard cartons having one end 12 by 12 inches closed only by screening but with all seams sealed. A dish containing the wave solution was attached inside the closed end of each carton. Since no effect was observed after 2 hours, the conditions were made more severe. An air vent measuring 1½ by 4 inches was cut in the bottom of otherwise closed cartons, and the same rabbits as used before were exposed in these to the vapors from the solution for 20 hours. No effect was observed after 10 hours, but after 20 hours the rabbit so exposed to thioglycollate fumes was paralyzed in its hind legs. It recovered on removal from the carton and was apparently normal in a short time. This test showed that a harmful effect may be expected to result from breathing the vapors of thioglycollate solution only after a long and continued period of exposure.

The rabbit exposed to hydrosulfide vapors showed no effect at the end of the first period, but after a further 8½ hours' exposure with only a small slit for admission of air, this rabbit died. Forced breathing of concentrated hydrosulfide fumes over a prolonged period caused slow intoxication followed by death.

Feeding Tests

Young growing rabbits were

given a standard diet into which was introduced 10 and 20 percent respectively of the hair-wave lotion for 12 days. The rabbits were weighed daily. Those receiving the food containing thioglycollate solution showed no harmful effects and no relative weight differences from the controls which had water added to the food in place of the solution being tested. The thioglycollate solution was not dangerously toxic when taken internally.

Of two animals receiving hydrosulfide solution in their diet, one showed loss in weight, and developed a condition of diarrhea on the eighth day. This condition was alleviated by including dried bread in the diet but the animal continued to eat sparingly until the conclusion of the experiment after 12 days. The second animal getting hydrosulfide in its diet lost weight and on the seventh day refused to eat, and died. Obviously the hydrosulfide solution was somewhat toxic when taken internally, and may even be considered to be lethal.

Intravenous Injections

Five milliliters and 10 milliliters respectively of undiluted wave solution were injected intravenously into the ears of young rabbits. The rabbit given the smaller injection of thioglycollate solution first received 2 milliliters but showed no effect. Three milliliters more were then injected, after which the animal reacted and died several hours afterward. The rabbit receiving the 10 milliliters injection died in 3 minutes. These results showed that thioglycollate solution was toxic when taken in an appreciable amount into the blood stream.

In using the hydrosulfide solution, three milliliters of a dilution of 1:100 of the wave solution were injected into one rabbit, which had an immediate convulsion but recovered and was apparently normal the next day and also after 7 days. An injection of 2 ml. of a 1:10 dilution into another rabbit resulted in an immediate convulsion followed by death in one minute. An injection of 2 ml. of undiluted wave solution resulted in immediate death. These results prove conclusively that the hydrosulfide wave solution was highly toxic when absorbed into the blood stream. The minimum lethal

dose of undiluted solution is about 0.05 milliliter per kilogram of body weight. Assuming an average weight for women to be 60 kilograms (132 pounds), and further assuming that the lethal effect on humans is the same as that for rabbits, this means that 3 milliliters or about one-tenth fluid ounce in the blood stream would be sufficient to cause death.

Conclusions

In view of the conditions of normal use involving a ten-minute period with a diluted solution, and the much more drastic test conditions described

here, the conclusion was reached that the thioglycollate wave solution could probably be considered safe for commercial use. While it has toxic properties, and is even lethal in large enough amounts in the blood stream, many of the liquids which frequently come into contact with the skin have a similar effect under these exceptional conditions.

On the basis of these results, especially the high toxicity of the hydrosulfide solution when absorbed even in considerably diluted form into the blood stream, the hydrosulfide type of wave solution cannot be considered safe for commercial use.



Radio Tubes and the Radio Repair Problem

RADIO heads the list of home appliances in need of repairs at this time, for about fifteen percent of all radio sets in American homes are no longer functioning, for lack of parts or repairs. Of the forty-six million sets that are capable of working, about one in four requires replacement of tubes or repairs affecting other parts. Of homes that have radio receivers, about one in twelve now do not have a set in working order. The eighteen million tubes authorized for production in 1944 are less than half of the number bought by consumers in a pre-war year, and even the production authorized may not be accomplished, on account of the difficulties of material supply and working the tube program in with war production schedules in the tube factories. In 1943 only about half the tubes sched-

uled to be produced for consumer use were actually distributed. Recent reports were to the effect that the tube situation, instead of getting better, is becoming worse.

The government's "control" of the problem was grossly at fault in two important respects; first, that certain of the most important and badly needed types of radio tubes were not produced (which seems not to have been the fault of the manufacturers), and second, that distribution was utterly unplanned, so that some active big-city markets got needed tubes, and in other places very few of the badly needed tubes were available for dealers. There are widespread complaints from rural sections because hundreds of thousands of farmers' radios are going silent on account of tube and battery shortages.

One radio repairman in a Massachusetts town, working alone, had a "backlog" of a hundred and fifty radio sets waiting to be repaired. This situation is paralleled in many communities. In most places, radio servicemen are hopelessly behind in their work and often are forced to carry on at low efficiency with no assistance and with worn or deteriorated instruments and test equipment, on work that in pre-war times several men would have been kept busy to turn out. There are some who suggest that with an election coming on, some positive action may be taken about the tube and battery shortages, rather than continuance of the issue of mere "authorizations" to manufacture, which has been about the limit of government war board actions respecting radio tubes for civilians in the past year or so.

Soaps and Creams for Shaving

(Continued from page 17)

Williams Glider (J. B. Williams Co., Glastonbury, Conn.) 5 oz., 39c. Thick and somewhat "greasy" and tended to clog razor. Price per shave, 2.0c. 3

* * *

U-X Improved Shaving Medium (U-X Mfg. Co., Inc., New York) 1 oz., 47c. This is a solid block or brick about $2\frac{1}{2} \times \frac{3}{4} \times 1\frac{1}{4}$ inches containing no soap and composed principally of magnesium carbonate (an inert substance, similar to powdered chalk) and magnesium peroxide (which would also appear to be practically inert as used) bound together with a water-soluble gum. A small amount of an ammonia or amine type compound and a small amount of reducing sugar are also present. *U-X* is used by stroking the wet block upon the wet beard, washing it off after a half minute or more, and then shaving. Face felt somewhat taut after using. One person found the preparation fairly satisfactory. Another person found the material of some value, but did not consider it a satisfactory substitute for shaving soap or cream. Another reported after repeated tests that the product did not give a satisfactory shave with one application. Two found this shaving medium unsatisfactory, one being of the opinion that it was of little more use than simply washing the face and coating it with a light suds of ordinary toilet soap.

Cake Shaving Soaps for Use in Cup or Mug

A. Recommended

Williams Mug Shaving Soap (J. B. Williams Co., Glastonbury, Conn.) About $1\frac{1}{2}$ oz., 10c. Coconut oil and rosin, relatively undesirable ingredients, were absent. Gave a good lather and was otherwise satisfactory. Price per shave, 0.03c. 1

B. Intermediate

Colgate Super Shaving Soap (Colgate-Palmolive-Peet Co.) 2 oz., 10c. Price per shave, 0.02c. 1

Colgate Cup Soap (Colgate-Palmolive-Peet Co.) 1.7 oz., 5c. Price per shave, 0.01c. Chemical analysis showed that this product contained coconut oil and rosin. 1

Abridged Cumulative Index

of

Previous 1944 Issues

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† indicates that listings of names or brands are included.



BUY WAR BONDS
AND STAMPS

Ratings of Motion Pictures

This section aims to give critical consumers a digest of opinion from a number of reviews, ranging from the motion picture trade press to Parents' Magazine, which rates motion pictures not only on their quality as entertainment but on their suitability in various aspects for children.

It should be emphasized that the motion picture ratings which follow do not represent the judgment of a single person but are based on an analysis of the reviews appearing in some 20 different periodicals. (See January 1944 issue for sources of the reviews.)

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), and C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

adv—adventure	mus—musical
biog—biography	mys—mystery
car—cartoon	sop—dramatization of a novel
com—comedy	rom—romance
cri—crime and capture of criminals	soc—social-problem drama
doc—documentary	t—technicolor
dr—drama	trav—travelogue
fan—fantasy	war—dealing with the lives of people in wartime
hist—founded on historical incident	wes—western
mel—melodrama	

A	B	C	Title	Rating
—	5	—	Abroad With Two Yanks	war-com A
—	6	2	Action in Arabia	war-mel AYC
1	9	6	Address Unknown	war-dr A
1	4	—	Adventure in Music	mus-doc AYC
7	8	2	Adventures of Mark Twain	biog AYC
—	2	7	Allergic to Love	mus-com A
—	2	1	Amazing Mr. Forrest, The	com A
—	4	2	American Romance, An	soc-dr-t AYC
—	10	7	And the Angels Sing	mus-com A
—	8	4	Andy Hardy's Blonde Trouble	com AYC
—	2	7	Are These Our Parents?	soc-mel A
—	3	3	Arizona Whirlwind	wes AYC
—	4	3	Atlantic City	mus-com A
3	7	—	Attack	war-doc A
—	3	3	Barbary Coast Gent	wes-mel A
2	11	2	Bathing Beauty	mus-com-t AYC
—	1	5	Beneath Western Skies	wes AYC
—	2	7	Bermuda Mystery	mys-mel AYC
—	8	7	Between Two Worlds	fan A
—	1	4	Black Magic	mys-mel A
—	3	7	Black Parachute, The	war-mel A
—	2	4	Block Busters	com A
1	2	1	Bride by Mistake	com A
1	11	5	Buffalo Bill	wes-biog-t AYC
—	4	1	California Joe	wes-dr A
—	3	—	Call of the Jungle	mel A
—	4	—	Call of the South Seas	mel A
—	11	1	Candlelight in Algeria	war-mel A
1	10	—	Canterville Ghost, The	mys-com AYC
1	3	3	Casanova Brown	com A
—	4	3	Charlie Chan in the Chinese Cat	cri-mel AYC
—	11	3	Chip Off the Old Block	mus-com AYC
—	5	9	Christmas Holiday	mus-dr A
—	3	—	Coastal Command	war-doc AYC
—	4	11	Cobra Woman	mel-t A
—	1	6	Contender, The	mel AYC

A	B	C	Title	Rating
4	11	3	Cover Girl	mus-com-t A
—	7	1	Cowboy and the Senorita	mus-wes AYC
—	1	2	Cowboy Canteen	mus-wes AYC
—	—	4	Crime by Night	cri-mys A
—	2	6	Cry of the Werewolf	cri-mel A
—	6	6	Curse of the Cat People, The	mys-mel A
—	3	1	Dangerous Journey	adv AYC
—	6	11	Days of Glory	war-mel A
—	1	4	Death Valley Rangers	wes AYC
—	2	2	Delinquent Daughters	cri-mel A
—	1	2	Delinquent Parents	mel A
—	5	3	Detective Kitty O'Day	cri-mys A
—	3	2	Devil Riders	wes AYC
—	1	3	Dixie Jamboree	mus-com AYC
1	9	2	Double Indemnity	cri-mel A
4	6	3	Dragon Seed	war-dr A
—	3	2	Drifter, The	wes AYC
2	13	3	Eve of St. Mark, The	war-dr A
—	5	3	Falcon in Mexico, The	cri-mys A
—	7	3	Falcon Out West, The	cri-mys A
—	—	6	Follies Girl	mus-com A
—	12	6	Follow the Boys	war-mus-com AYC
—	4	2	Follow the Leader	cri-com A
—	6	—	Forty Thieves	wes AYC
—	5	2	Forty-Eight Hours	war-mel A
—	9	8	Four Jills in a Jeep	war-mus-com A
—	3	1	Frontier Outlaws	wes AYC
—	4	3	Gambler's Choice	cri-mel A
4	10	1	Gaslight	mys-mel A
—	6	8	Ghost Catchers	com AYC
—	1	5	Ghost That Walks Alone	cri-com A
—	3	7	Gildersleeve's Ghost	com A
—	3	6	Girl in the Case	mel AYC
—	4	—	Girl Who Dared, The	mys-mel A
9	10	—	Going My Way	mus-dr AYC
—	3	4	Goodnight Sweetheart	com A
—	4	3	Goyescas	mus-com A
—	2	4	Great Moment, The	biog-dr AYC
—	4	—	Greenwich Village	mus-com-t A
—	—	3	Gunsmoke Mesa	mus-wes AYC
—	2	3	Gypsy Wildcat	mus-mel-t AYC
7	9	—	Hail The Conquering Hero	war-com A
—	10	5	Hairy Ape, The	soc-dr A
—	4	5	Hat-Check Honey	mus-com AYC
—	2	3	Heavenly Days	com AYC
—	5	3	Henry Aldrich Plays Cupid	com AYC
—	5	1	Henry Aldrich's Little Secret	com AYC
—	6	6	Her Primitive Man	com A
—	5	2	Heroes Are Made	war-mel-propaganda A
—	7	—	Hey, Rookie	war-mus-com AYC
—	7	2	Hi, Good Lookin'	mus-com AYC
—	3	—	Hidden Valley Outlaws	wes AYC
1	7	9	Hitler Gang, The	war-dr-propaganda A
2	13	—	Home in Indiana	com-t AYC
—	5	3	Hot Rhythm	mus-com AYC
1	6	8	Hour Before Dawn, The	war-dr AYC
—	5	3	I Love a Soldier	war-com A
1	3	—	Impatient Years, The	war-com A
—	9	5	Imposter, The	war-dr A
—	5	3	In Society	mus-com AYC
—	4	6	Invisible Man's Revenge, The	mys-mel A
1	14	2	It Happened Tomorrow	com A
—	6	3	Jam Session	mus-com A
—	6	2	Jamboree	mus-com AYC
1	6	2	Janie	com A
—	7	4	Johnny Doesn't Live Here Any More	fan A
—	5	6	Jungle Woman	mel A
—	2	1	Kansas City Kitty	mus-com A
—	7	1	Kismet	fan-t A
1	10	6	Knickerbocker Holiday	mus-com AYC

A	B	C			A	B	C		
—	2	14	Ladies Courageous	war-dr A	—	4	6	Sensations of 1945	mus-com A
—	2	8	Ladies of Washington	war-mel AYC	—	5	9	Seven Days Ashore	war-mus-com A
—	5	5	Lady and the Monster, The	mys-mel A	—	3	3	Seven Doors to Death	er-mel A
1	13	4	Lady in the Dark	mus-com-t A	1	4	1	Seventh Cross	war-mel A
—	3	4	Lady in the Death House	mys-mel A	—	2	3	Shadows in the Night	cri-mel A
—	9	3	Lady, Let's Dance	mus-com AYC	—	2	4	Shake Hands with Murder	cri-mel AYC
—	1	2	Laramie Trail, The	wes AYC	—	4	3	She's a Soldier, Too	war-com AYC
—	3	—	Last Horseman, The	wes AYC	—	11	4	Shine On, Harvest Moon	mus-bog-t AYC
—	1	5	Law Men	wes AYC	1	14	3	Show Business	mus-com A
—	2	1	Lili Marlene	wsr-mel A	—	3	2	Sign of the Cross (re-issued)	hist-dr A
—	2	4	Louisiana Hayride	mus-com AYC	—	1	3	Silent Partner	cri-mys AYC
—	6	1	Lumberjack	wes AYC	4	5	1	Since You Went Away	war-dr AYC
—	1	2	Machine Gun Mamma	mel A	—	1	4	Sing, Neighbor, Sing	mus-com AYC
—	2	4	Mademoiselle Fif	soc-dr A	10	7	—	Slightly Terrific	mus-com AYC
—	6	—	Maisie Goes to Reno	com A	—	5	—	Song of Bernadette, The	dr AYC
—	3	9	Make Your Own Bed	com A	1	8	—	Song of Nevada	mus-wes AYC
1	7	4	Man from Frisco, The	war-dr AYC	—	3	1	Song of the Open Road	mus-com AYC
1	7	3	Marine Raiders	war-dr AYC	—	2	6	Sonora Stagecoach	wes AYC
—	1	4	Marriage is a Private Affair	com A	—	2	3	South of Dixie	mus-com A
—	6	—	Mask of Dimitrios	cri-mel A	—	12	4	Stars on Parade	mus-com A
—	5	5	Meet the People	war-mus-com A	1	9	7	Step Lively	mus-com A
8	5	—	Memphis Belle, The	war-doc-t AYC	5	11	—	Story of Dr. Wassell, The	war-bog-t A
—	2	1	Men of the Sea	war-mel AYC	—	9	3	Sullivans, The	war-dr AYC
—	3	6	Men on Her Mind	mus-dr A	—	3	2	Summer Storm	dr A
—	5	—	Merry Monahans, The	mus-com A	—	6	—	Sundown Valley	wes AYC
—	3	5	Million Dollar Kid	com A	—	1	5	Sweet and Lowdown	mus-com AYC
—	7	1	Minstrel Man	mus-com AYC	—	3	5	Sweethearts of U.S.A.	mus-com AYC
2	8	8	Miracle of Morgan's Creek, The	com A	—	—	—	Swing Out the Blues	mus-com AYC
—	3	5	Monster Maker, The	mel A	—	2	6	Take It Big	mus-com A
—	3	6	Moon Over Las Vegas	com A	—	7	7	Take It or Leave It	com A
3	8	4	Mr. Skeffington	nov A	—	4	11	Tampico	war-mel A
—	8	4	Mr. Winkle Goes to War	war-nov AYC	—	5	4	Taxi to Heaven	mus-com AYC
—	3	6	Mummy's Ghost, The	mys-mel A	—	—	5	Teen Age	soc-mel A
—	4	2	Music in Manhattan	mus-com A	—	1	3	They Live in Fear	war-dr A
—	2	8	My Best Gal	mus-dr AYC	—	5	1	They Met in Moscow	mus-com AYC
—	3	2	Mystery Man	wes AYC	1	8	4	This Is the Life	rom AYC
—	1	6	Nabonga	mel AYC	—	5	1	Three Little Sisters	mus-com AYC
—	9	2	Navy Way, The	war-mel AYC	—	4	8	Three Men in White	com AYC
—	3	—	Negro Soldier, The	war-doc A	—	—	3	Three of a Kind	com A
—	6	3	Night of Adventure, A	cri-mel A	—	3	—	Trail of Terror	mus-wes AYC
—	6	4	Nine Girls	cri-mys A	—	6	3	Trocadero	mus-com AYC
—	6	4	No Greater Love	war-dr A	—	4	1	Tucson Raiders	wes AYC
2	14	2	No Time for Love	com A	—	4	5	Tunisian Victory	war-doc AYC
—	3	1	Oh, What a Night	cri-mel A	—	—	5	Twilight on the Prairie	mus-wes AYC
—	14	1	Once Upon a Time	com-fan AYC	3	12	1	Two Girls and a Sailor	mus-com AYC
—	3	3	One Inch from Victory	war-doc A	—	1	5	Two Soldiers	war-dr A
—	2	4	Outlaw Trail	wes AYC	—	2	5	Two-Man Submarine	war-mel AYC
—	2	4	Outlaws of Santa Fe	wes AYC	—	—	—	—	—
—	2	7	Pardon My Rhythm	mus-com AYC	—	3	4	U-Boat Prisoner	war-mel A
—	3	3	Partners of the Trail	wes AYC	—	5	2	Uncensored	war-mel A
—	12	7	Passage to Marseille	war-mel A	—	9	6	Uncertain Glory	war-mel A
—	5	3	Passport to Adventure	war-com A	—	2	2	Underground Guerrillas	war-mel A
—	1	2	People's Avengers	war-doc A	1	14	1	Up in Arms	war-mus-com-t A
2	14	1	Phantom Lady	mys-mel A	—	8	7	Up in Mabel's Room	com A
1	10	6	Pin-Up Girl	war-mus-com-t A	—	—	—	—	—
—	2	4	Port of Forty Thieves	mys-mel A	—	2	1	Valley of Vengeance	wes AYC
3	9	5	Purple Heart, The	war-dr A	—	2	1	Vigilantes Ride, The	mus-wes AYC
—	2	5	Racket Man, The	cri-mel AYC	3	7	5	Voice in the Wind	war-dr A
—	2	3	Raiders of Red Gap	wes AYC	—	1	6	Voodoo Man, The	mys-mel A
—	3	—	Raiders of Sunset Pass	wes AYC	—	4	4	Waterfront	war-mel A
—	3	3	Raiders of the Border	wes AYC	—	4	5	Wave, a Wac, a Marine, A	com A
—	4	2	Range Law	wes AYC	—	4	4	Weekend Pass	war-mus-com AYC
—	5	7	Rationing	com AYC	—	3	3	Weird Woman	cri-mys A
—	1	6	Return of the Ape Man	cri-mel A	1	1	3	Westward Bound	wes AYC
—	3	4	Riders of the Deadline	wes AYC	—	2	6	We've Come a Long Way	doc-propaganda AYC
—	3	—	Riding West	mus-wes AYC	—	3	—	What a Man!	com A
—	5	8	Roger Touhy, Gangster	mel A	—	3	3	When Strangers Marry	mys-mel A
—	5	4	Rosie, the Riveter	mus-com A	—	6	4	Whispering Footsteps	mys-mel A
—	1	5	Sailor's Holiday	war-com A	—	6	4	Whistler, The	mys-mel A
—	7	2	Scarlet Claw, The	cri-mel A	—	6	8	White Cliffs of Dover	war-dr AYC
—	11	1	Secret Command	war-mel A	—	8	2	Wilson	bog-t A
—	4	3	Secrets of Scotland Yard	war-mys AYC	—	6	1	Wing and a Prayer	war-mel A
2	16	—	See Here, Private Hargrove	war-com AYC	—	2	1	Wyoming Hurricane	wes AYC
—	—	—	—	—	—	9	5	Yellow Canary	war-mys AYC
—	—	—	—	—	—	6	2	Yellow Rose of Texas	mus-wes AYC
—	—	—	—	—	—	6	4	You Can't Ration Love	mus-com AYC
—	—	—	—	—	—	2	5	Youth Runs Wild	soc-dr A

The Consumers' Observation Post

[Continued from page 4]

MATTRESSES OF COTTON FELT are about all that can be found in the stores these days. Models of better quality than the late unlamented "Victory" models are currently made from long-staple cotton, but they are less resilient than the innerspring type on which production is still prohibited. Prices start at \$40, which is about the price of a good high-priced cotton-felt mattress reported on by CR in its 1941 test.

* * *

HARDWOOD FLOORS may be simply prepared for rewaxing by removing their film of dirt and grease with a cloth wrung out in warm, soapy water. Use as little soap and water as possible. Applying a cloth moistened with a little gasoline or turpentine would be more effective, but, because this method presents a dangerous fire- or explosion-hazard, it is not recommended. In regular cleaning of a waxed floor, a dry, unoiled mop or brush should be used.

* * *

RAYON SUITS have been bought by men this past summer in the belief that they were getting tropical worsteds, a textile trade journal discloses. Rayon suits, for some reason, are not required to be labeled as to fiber content. Rayon is likely to wrinkle worse than the tropical worsted and may not be as cool. If the neighborhood tailor or cleaning shop should mistake rayon for worsted, the garment may suffer in the cleaning and pressing process.

* * *

FAST FREEZING OF ICE CUBES can be accomplished by spilling a little water on the evaporator surface on which the tray sits. This little trick provides better conduction of heat from the tray to the evaporator through the film of ice that is formed. If, on the other hand, the interior of the evaporator is heavily frosted, the freezing process will not be rapid because the air spaces in the coating of snow and ice act as partial insulators against heat flow.



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RECORD CONNOISSEURS will be interested in a word of caution from a writer to an Australian radio magazine which recommends that the same pickup should always be used on the same records. The pickup wears the record most at its resonant frequencies and using the same one continually tends to minimize the development of distortion which occurs due to the resonance in the pickup and its structure. Since loud passages of records lose quality with wear more rapidly than most record users suppose, the careful record buyer will, so far as practicable, avoid records that have exceptionally loud peaks of sound.

* * *

PULMONARY COMPLICATIONS, following abdominal operations, occurred more frequently among patients who smoked more than ten cigarettes a day, according to a study in a British medical journal. Out of a study of more than a thousand cases, it was found that post-operational complications affecting the lungs were six times more frequent among the more-than-ten-a-day smokers than among the non-smokers. The physician making the study suggested that those who contemplate such an operation should cut down on their smoking before entering the hospital.

* * *

Presto Staple Remover is a handy gadget (25c at the five-and-dime stores) for taking staples out of papers. It eliminates broken fingernails by providing well-shaped metal prongs that slip under the staple and are then opened up (separated) by a simple lever arrangement. The correct way to use the device is to insert the prongs under the staple on the right (upper) side of the paper—not under the short tips on the underside.

* * *

Sanitas (Standard Coated Products, New York City), a washable wall-covering, has been found by one enterprising housewife to be an acceptable substitute for the vanishing oilcloth and non-existent pyroxylin kitchen tablecloths. It is usually available at paint, hardware, or decorators' shops and is priced around 50c the yard in a variety of patterns. One drawback, however, seems to be that it is not sold in less than 3 yard lengths. Since the width is 47 inches, this length is considerably more than ample for one tablecloth.

* * *

CORRECTION, PLEASE. Canned soups were rationed, not unrationed as stated in the Observation Post for August. The information that canned soups no longer required ration points, which came from a June 1944 issue of a leading food trade journal, was incorrect, although the points per can have been low. As this Bulletin goes to press, however, ration restrictions have been lifted on canned soups along with many other canned food products.

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PHONOGRAPH RECORDS

By Walter F. Grueninger

Please Note: Prices quoted do not include taxes. In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended.

ORCHESTRA

Cerelli: *Sonata in F.* Biggs (organ) with the Arthur Fiedler Sinfonietta. 2 sides, Victor 10-1105. 75c. An interesting old work in four short movements. The recording has a somewhat nasal quality and too little bass. Quiet surfaces.

Interpretation A
Fidelity of Recording B

Enesco: *Roumanian Rhapsody No. 1.* (3 sides) & **Reznicek:** *Donna Diana—Overture* (1 side). Chicago Symphony Orchestra under Stock. Columbia X203. \$2.50. Enesco's spirited, earthy rhapsody which is widely enjoyed fares somewhat better on Victor 18201, though it has been cut slightly. Overture is a lively, inconsequential overture. A re-issue. Quiet surfaces.

Interpretation A
Fidelity of Recording A

Grieg: *Peer Gynt—Suite No. 1.* London Philharmonic Orchestra under Beecham. 4 sides, Columbia Set 180. \$2.50. A re-issue with a new album cover. Selections composed for Ibsen's drama include "Morning," "Death of Asa," "Anitra's Dance," "In the Hall of the Mountain King." Extraordinary performance. Quiet surfaces.

Interpretation AA
Fidelity of Recording A

Rimsky-Korsakoff: *Scheherazade.* Cleveland Orchestra under Rodzinski. 10 sides, Columbia Set 398. \$5.50. A re-issue of a set first marketed four years ago. The music has worn itself thin for me but it is still a popular suite. This performance and recording are commendable, but even better is Victor Set 920.

Interpretation AA
Fidelity of Recording AA

Tchaikovsky: *Nutcracker Suite.* Chicago Symphony Orchestra under Stock. 6 sides, Columbia Set 395. \$3.50. A re-issue. One of the most delightful light suites in the orchestral repertoire. Superior to this recording in all respects is the older Victor Set 265.

Interpretation A
Fidelity of Recording B

A Wagner Concert. Pittsburgh Symphony Orchestra under Reiner. 8 sides, Columbia Set 549. \$4.50. Included are "Siegfried—Forest Murmurs," "Lohengrin—Preludes" to Acts 1 and 3, "Ride of the Valkyries," "Die Meistersinger—Prelude." All of these discs were issued previously but are now, for the first time, offered in an album. Neither the interpretation nor the recording equals that of other recordings of these selections.

Interpretation B
Fidelity of Recording B

CONCERTO

Bach: *Double Concerto in D Minor.* Menuhin and Enesco (violins). 4 sides, Victor Set 932. \$2.50. A grand work for two solo violins, very likely the most popular in its field. This recording is a re-issue, for the first time presented in an album. The rival recording featuring Szigeti and Flesch in Columbia Set X90 tops this in performance and fidelity. Quiet surfaces.

Interpretation A
Fidelity of Recording C

CHAMBER & INSTRUMENTAL

Bach: *Partita No. 3 for Unaccompanied Violin* arranged for Piano—Selections only. Rachmaninoff (piano). 2 sides, Victor 11-8607. \$1. A marvelous performance by Rachmaninoff of his own arrangement. My vote, however, goes to Menuhin's recording of the original in Victor Set 488. Quiet surfaces.

Interpretation AA
Fidelity of Recording A

Bach: *Toccata and Fugue in E Minor.* Serkin (piano). 2 sides, Columbia 71594. \$1. For the connoisseur. Expertly performed.

Interpretation AA
Fidelity of Recording A

Debussy: *Sonata No. 3* (3 sides) & *Clair de Lune* (1 side). Szigeti & Foldes (violin & piano). Columbia Set X242. \$2.50. An album that justifies superlatives. The sonata, composed in 1917, was Debussy's last work, one which grows on me with repeated hearing. The performance and recording are the best available on records. The odd side offers an arrangement of a popular Debussy piano piece. Quiet surfaces.

Interpretation AA
Fidelity of Recording AA

Villa Lobos: *A Prole do Bebe* (3 sides) & *Allegria Na Hora* (1 side). Rubinstein (piano). Victor Set 970. \$2.50. The brief sketches of the child's family are mildly amusing though not, to my mind, worth repeated hearing. The filler, *Joy in the Garden*, uses less than half the record surface. Superbly played.

Interpretation AA
Fidelity of Recording AA

VOCAL

Mozart: *Marriage of Figaro—Se vuol ballare.* Pinza (bass) & *Magic Flute—Bei Maennern,* Welche Liebe Fuehlen. Pinza (bass), Rothberg (soprano). 2 sides, Victor 10-1104. 75c. Tuneful music. Pinza is superb, but Rothberg forces a little. Nevertheless an outstanding disc. Quiet surfaces.

Interpretation AA
Fidelity of Recording AA

LIGHT, POPULAR, & MISCELLANEOUS

Glenn Miller: *Glenn Miller & His Orchestra.* 8 sides, Victor Set P148. \$2.50. An album of "hits that led to the phenomenal success" of this band. No vocals. Recording uneven. Surfaces audible. Included are *Tuxedo Junction*, *In the Mood*, *Little Brown Jug*, and other foxtrots.

Interpretation A
Fidelity of Recording A

Fats Waller Favorites. Waller (pianist-comedian) and his Band. 8 sides, Victor Set P151. \$2.50. Released as a memorial album. Seven sides have been issued previously, *Honeysuckle Rose* is new. For the jive fan and admirer of this performer, a worthwhile collection. Audible surfaces.

Interpretation AA
Fidelity of Recording B

Xavier Cugat's Mexico. Xavier Cugat and His Waldorf Astoria Orchestra. 8 sides, Columbia Set C98. \$2.50. Fancy arrangements rob this music of much lusty beauty. Mostly instrumental, though some vocal. The recording is uneven. Noisy surfaces.

Interpretation B
Fidelity of Recording B

Remember. Buddy Clark (baritone). 8 sides, Columbia Set C99. \$2.50. "Eight nostalgic melodies which, since World War I, have sold over 20 million copies of sheet music," the album notes reveal. Included are *Smiles*, *Dear Old Pal of Mine*, *Long Long Trail*, *My Buddy*, *Baby's Prayer at Twilight*, etc. The idea had possibilities. The execution, however, shows a regrettable lack of musicianship. Definitely "ham" with Hammond organ accompaniments. Quiet surfaces.

Interpretation C
Fidelity of Recording A



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